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LINCOLNSHIRE NATURAL HISTORY BROCHURE
No. 2

**THE
BIRDS OF
LINCOLNSHIRE**



A. E. SMITH, M.A.
AND
R. K. CORNWALLIS,
B.A., M.B.O.U.

PUBLISHED BY
LINCOLNSHIRE NATURALISTS' UNION
LINCOLN

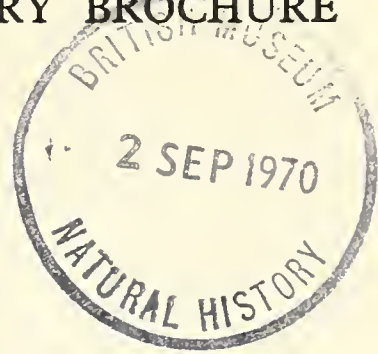


Photograph by courtesy of Harold Auger

HERON AND YOUNG AT A NEST IN A LINCOLNSHIRE HERONRY

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BY

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President of the Lincolnshire Naturalists' Union, 1952 and 1953

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PREFACE

IN 1947 the Lincolnshire Naturalists' Union decided to publish a series of brochures on the natural history of Lincolnshire. It seemed appropriate to begin with a handbook on the geology of the county, a subject fundamental to so many studies. Professor H. H. Swinnerton and Dr. P. E. Kent undertook to write such a work and it was published in 1949 under the title of *The Geology of Lincolnshire*.

In view of the increasing popularity of ornithology and of the need for a new basis for further research on the status and distribution of birds in the county—the only previous List, compiled by the Reverend F. L. Blathwayt, was published in 1915—it was decided that the birds of Lincolnshire should be the subject of the second brochure. Mr. S. A. Cox, then ornithological secretary of the Union, was invited to prepare a new list of the county's birds and this was completed in 1948. At the same time Mr. A. E. Smith and Mr. C. L. Ottaway were preparing a similar list which they hoped to have published. It was obvious to the General Editor of this series of brochures that, if possible, the material collected by these three workers ought to be brought together to form the basis for a more comprehensive brochure. By that time, moreover, a great deal of new information was becoming available not only from the north of the county, which up to that time had received most attention from ornithologists, but also from southern areas. Furthermore, the establishment of the bird observatory at Gibraltar Point in 1949 gave new emphasis to migration studies and provided a general stimulus to ornithological research in the county.

The above-mentioned workers generously agreed to place their material at the disposal of the General Editor and, after full consultation with all concerned and after Mr. S. A. Cox had expressed a wish to withdraw from authorship, he invited the present joint-authors to compile a completely revised and up-to-date list and to write the introductory chapters which now appear in the brochure. The information collected by the other workers up to 1948 has been of great value to the authors in the preparation of their List.

Many ornithologists have readily placed unpublished records and observations at the disposal of the General Editor and the authors. It would be difficult to mention each one here and to select a few would be invidious. All the information received has been much appreciated and it is hoped that those who gave it will feel that their contributions have been put to good purpose and that a useful work has been produced.

In the planning and preparation of this brochure the General Editor and the authors have received much help from Mr. Arnold Roebuck whose original work on the status of certain species of birds in the county and on their economic importance is well known. Others who gave assistance in the preparation of the List are mentioned in the introduction to it. In addition, Mrs. Mary Smith gave valuable help in preparing typescripts and in drawing several of the maps.

CHAPTER I

BIRDS, MEN AND THE LAND IN LINCOLNSHIRE

INTRODUCTION

To the majority of people beyond its borders Lincolnshire remains one of the most remote and least known of the English counties. Its great size, second only to that of Yorkshire, is seldom appreciated; and, whilst there is perhaps some justification for the popular notion that Lincolnshire is uniformly flat, in fact it embraces a variety of landscape. This is largely man-made, however, for man has wrought great changes on the land in his efforts to cultivate it. At the same time Lincolnshire has remained essentially rural. There are a few large industrial and market centres such as Lincoln, Scunthorpe, Grimsby, Grantham and Boston, but over most of the county the population is scattered in small market towns, villages and hamlets and in many areas it is sparse.

Although the greater part of the county is less than a hundred feet above sea level, the hill ranges are important and even conspicuous features in all but the Holland division in the south-east. There are two such upland areas in the county: the ridge of oolitic limestone on the western side and the chalk Wolds on the east. The limestone forms a wide plateau in the south-west but it narrows northwards until north of Lincoln it is only a few miles wide. Its western edge is a steep escarpment known as the Cliff which overlooks the broad valley of the Trent. On its eastern side south of Lincoln it spreads into a gently sloping plateau four or five miles wide known as the Heath, a dry and sparsely wooded region. South of the Ancaster gap the limestone strip broadens more rapidly and is cut by the valleys of the Witham and the Glen. These valleys and the eastern slopes of the ridge here are heavily wooded.

In the valley of the Trent there are still rough, marshy fields by the riverside, but the carr-lands of the Isle of Axholme are now intensively cultivated and only one or two remnants of peat fen remain. In the Scunthorpe area are large tracts of blown sand which in places cover the limestone ridge. West and south-west of Lincoln there are sand and gravel deposits. In both these areas, especially around Scunthorpe, these deposits give rise to heathland and to open pine and

birch woodlands, a type of scenery now largely changed by extensive plantations of coniferous woods.

Between the limestone and the chalk hills lie the clay lowlands which still carry some of the most extensive deciduous woodlands in the county. Blown sand in the Market Rasen area and river sands and gravels in the Woodhall Spa district again produce heath with pine and birch woods.

The chalk Wolds form a broad upland area some forty-five miles long and between six and twelve miles wide extending in a south-south-easterly direction from the Humber near Barton to the vicinity of Spilsby. The western escarpment is steep in the north rising to a height of 548 feet near Caistor, but southwards it becomes lower and less pronounced, being masked by boulder clay. The dip slope, which ranges between 200 and 400 feet, extends eastwards to an old cliff line overlooking the Marshland. The northern Wolds have few streams or valleys, but further south several small streams flow eastwards or south-eastwards to the Marsh and the sea or southwards to join the Witham. The chalk is extensively overlaid by deposits of glacial boulder clay, whilst at places at its western and more especially at its southern edge the underlying clays and sandstones are revealed.

Between the Wolds and the sea lies the narrow strip of the Marshland, a wave-cut platform in the chalk thickly covered with boulder clay. On its western side, in the so-called Middle Marsh, are extensive woodlands, but nearer the sea the boulder clay is covered by a veneer of marine silts and clays which provide rich pastureland intersected by wide, reedy dykes, an open landscape with few trees or hedges.

The whole of south-east Lincolnshire is fenland, now the richest and most intensively cultivated area in the whole of England. The old villages here lie thickly along the western and northern margins and on the old silt bank which lies in an arc round the Wash from Wainfleet to Kings Lynn. In these areas of older settlement the fields are smaller, the trees and hedges more numerous and the cultivation more varied than in the open fen.

The coast itself has undergone interesting physical changes which have left the bulge from Mablethorpe to Skegness exposed to the erosive action of the tides. Only a single line of dunes, now reinforced by concrete walls, protect the Marshland from inundation. North of Mablethorpe the coast soon comes into the shelter of Spurn and the

quieter conditions allow deposition of mud and sand and the subsequent formation of salt-marshes. South of Skegness accretion by wind-and wave-borne sand and shingle has led to the formation of an extensive system of sand-dunes and related salt-marshes; whilst south of the Gibraltar Point, in the shelter of the land mass of East Lincolnshire, there are great sand and mud flats, and wide salt-marshes fringe the whole of the Lincolnshire shore of the Wash into which flow the little river Steeping at Gibraltar Point and the Witham, Welland and Nene further south.

WOLDS AND LIMESTONE HEATH

Until the 18th century much of the land of Lincolnshire was in a natural or semi-natural condition. When Arthur Young travelled through the county in 1799 some enclosure of the Wolds had been made in the previous fifty years. "Forty years ago," he wrote, "it was all warren for thirty miles from Spilsby to beyond Caistor," and elsewhere he spoke of "the bleak wolds and heaths being almost enclosed and planted within twenty or thirty years". In 1799, however, there were still large tracts of open grassland with thorn and gorse scrub on the chalk tops. Thirty years later when Cobbett travelled over these hills the transformation of the landscape had been completed and it was "a very fine country, large fields, fine pastures, flocks of those great sheep". Writing in 1852, Clarke confirms that "all the open fields have disappeared, a great part having been enclosed within the last thirty years. The gorse has been grubbed, the rough sward burned and all the warrens, with one or two exceptions, have been brought into cultivation. No portion of the ground has been allowed to remain (as on the Downs of southern England) a tract of sheepwalks in its primitive vegetation of heath and fern, but the highest parts are all in tillage and the whole length of the Wolds is intersected by neat white-thorn hedges, the solitary furze bush appearing only where a roadside or plantation border offers an uncultivated space." The hedges are fewer and smaller at the present day, but otherwise the landscape of the higher Wold tops is that described by Clarke. The great arable fields are even more intensively cultivated and the rare fields of permanent pasture are largely confined to the valleys where there are streams. Here and there a hillside too steep for cultivation or the wide grass verges and occasional beech clumps beside an ancient trackway like the Bluestone Heath Road remind one of the open heath. And the flowers of the chalk grassland are still there, but most of the birds have

gone. Like the Wolds, the Heath of the limestone plateau south of Lincoln was enclosed in the latter half of the 18th century and it too is now given over largely to arable cultivation. Stone walls divide the fields in some areas and there are many large aerodromes.

In the absence of detailed accounts one can only attempt to reconstruct the bird life of the open Wold and Heath from scattered records and from a comparison with similar habitats elsewhere which remain in a natural state. The Great Bustard and probably the Stone Curlew nested here, whilst Buzzards, Kites, Kestrels and other birds of prey which inhabited the woods of nearby valleys and lowlands doubtless hunted over the open country. Lapwings must have been numerous, whilst the small birds probably included Wheatears, Whinchats and Stonechats, as well as such common heathland species as Skylarks, Meadow Pipits and Linnets. Of these only Lapwings and Skylarks now nest in the great arable fields. The enclosing hedges and hedgerow trees provide nesting sites for a variety of common small birds, but many of the hedges are cut so low that they afford little cover for nests. Here and there copses and belts of trees, often mainly conifers, have been planted on steep hill-sides, and these provide nesting sites for several species, notably birds of prey, Sparrow Hawks, Kestrels, Tawny and Long-eared Owls. In one or two remote valleys of the north Wolds, where there is still some rough grassland, Short-eared Owls nest occasionally.

VALLEYS AND MARGINS OF THE UPLANDS

Along the margins of the Wolds and the limestone and in many valleys in both these upland areas, the landscape is more varied and more thickly wooded. Apart from the large woods, there are many small copses of oak and ash, more hedgerow trees and often bigger hedges round the fields and by the roadsides. There is more old pasture too and on the poor soils, like those of the Spilsby sandstone in the south Wolds, there are still occasional rough and marshy fields with patches of gorse. In this country the small streams cut deep beds in the clays and sandstones and are often lined for miles with alders and willows. It is in these areas that there are most country houses, many with parks full of old trees and often with ornamental lakes and gardens, and many copses and belts of trees. The villages, too, are mainly in the valleys and along the hill margins and there are numerous farmyards, gardens and small orchards. It is a landscape with a wide variety of birds in both summer and winter, birds of hedge-

PLATE I



RISBY WARREN ABOUT 1910



See over for Notes.

Blocks lent by Harold E. Dudley, F.S.A.

CROSBY WARREN IN THE EARLY TWENTIETH CENTURY

PLATE I

The summit of Risby Warren near Scunthorpe about 1910. This scene was typical of the higher parts of several of the sandy heaths of north-west Lincolnshire at that period. On Scotton Common and perhaps elsewhere Stone Curlews nested in this type of habitat until the early years of the present century. A few pairs of Wheatears still breed on the one or two small areas of this kind which have escaped afforestation or cultivation.

Crosby Warren near Scunthorpe in the early twentieth century. Shallow pools or flashes occur in some of the low-lying parts of the blown-sand region of north-west Lincolnshire. Such pools still remain on Scotton and Laughton Commons in spite of drainage and afforestation (Plate II), but Crosby Warren and some similar areas adjoining it have been almost entirely destroyed by ironstone mining. Chimneys of the Scunthorpe iron-works can be seen in the background of this photograph. The colony of Black-headed Gulls seen here numbered about 5,000 at the end of the last century, but became extinct about 1930.

row, copse, roadside, parkland, garden, orchard, village and farm-yard. It, too, is affected by changes in farming methods and practices, and the disappearance of hedges and trees over large areas and the conversion of roadside dykes into something resembling fenland drains bring greater change than in the already bare uplands and affect the bird population more drastically.

HEATHLANDS

In the region of Scunthorpe, Brigg and Gainsborough there are extensive tracts of blown-sand which in places cover the limestone ridge and give rise to sandy warrens with miniature dune systems, to grass and heather heaths and to open pine, oak and birch woodland. Small pools and areas of marsh and bog add to the variety of habitat. When Abraham de la Pryme saw these heaths in 1695 they reminded him of "the sandy deserts of Egypt and Arabia, which I had a most clear idea of when I beheld these sandy plains". Until the third quarter of the last century this was a remote district, much of it in its natural condition, but the rapid growth of Scunthorpe and the ironstone mining encroached upon it and disturbed it. Even so, large tracts such as Scotton and Laughton Commons and Manton and Twigmoor Warrens remained largely untouched until the early 1920's. Since then, however, almost the whole of Scotton and Laughton Commons have been afforested by the Forestry Commission and are now vast coniferous woodlands surrounded by miles of wire fences and intersected by metalled roads. The encroachment of Scunthorpe and the ironstone mining on such areas as Crosby and Risby Warrens has continued, whilst Manton Warren and many smaller patches of heath have been ploughed up during and since the second world war. Now only one or two small pieces like Twigmoor Warren remain in a natural state.

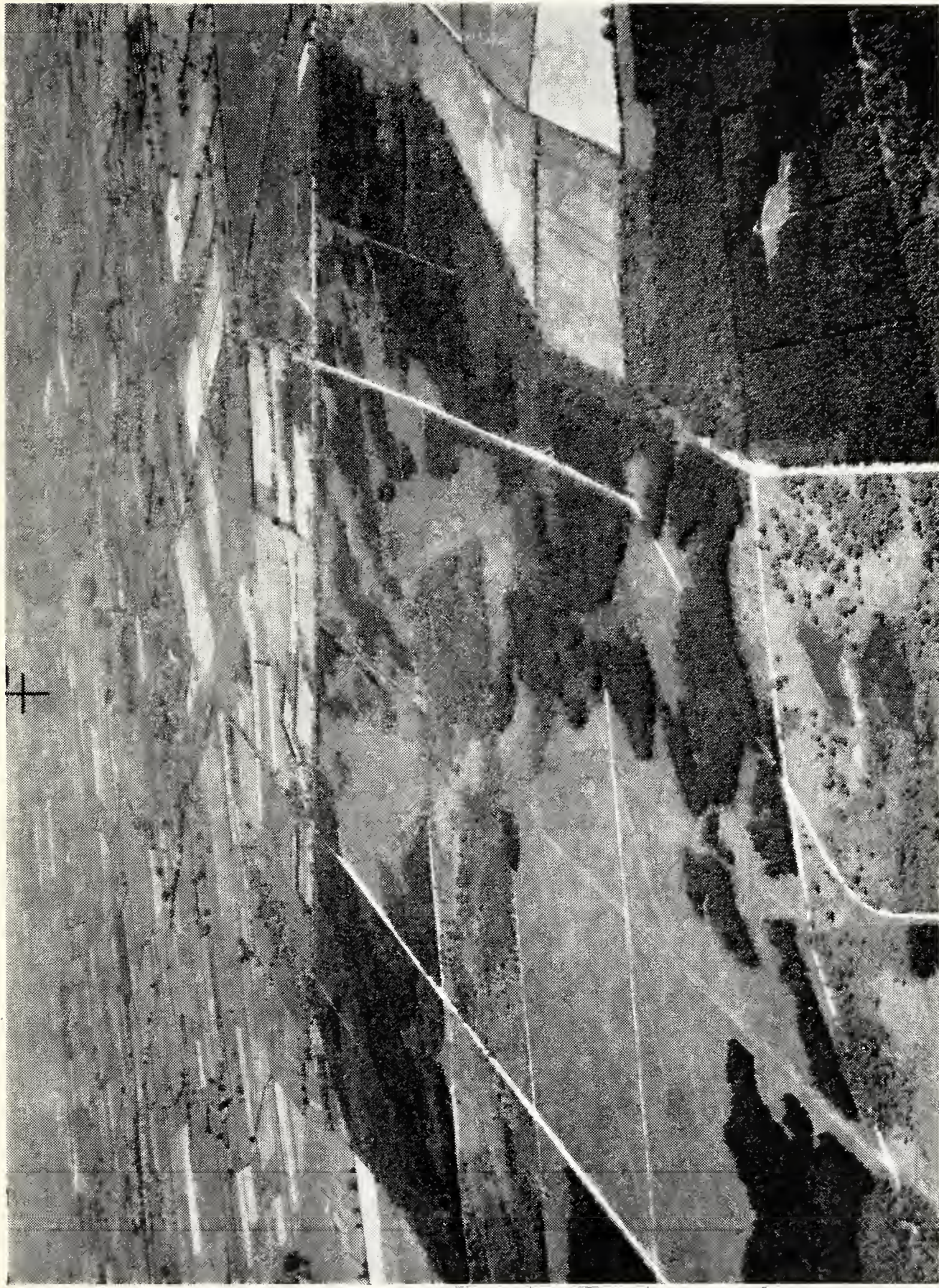
The rich bird life of the area has suffered, of course, from these changes. The Dunlin and the Ruff nested on Scotton Common until about the 1880's, and the Stone Curlew did so until the early years of the present century. Hen Harrier and Merlin also nested in the district in the 19th century. These have gone and other species have become rare. The Wheatear, for example, now breeds in only one or two of the suitable places that are left. The Whinchat and the Stonechat have almost entirely disappeared, though their decrease may not be wholly due to loss of habitat. In spite of all this the district retains a rich and varied bird population. Several species of ducks nest near the numerous ponds and flashes which still survive even in the afforested

areas. There are colonies of Black-headed Gulls, though the famous colony at Twigmoor has been almost entirely deserted in recent years. Snipe and Redshank nest in the marshy areas and low-lying pastures; Lapwings and a few pairs of Curlews on the remaining patches of heath. The Nightjar and the Redpoll occur in the open pine and birch woodland and there are several pairs of Woodlarks, whilst the Tree Pipit is commoner in this type of habitat than anywhere else in the county. In the early stages of their growth the new coniferous plantations also attract a variety of breeding birds, including the Goldcrest, but later they usually become too close and gloomy for all but a very few species. Nevertheless, there are open spaces and clearings in the forests and always areas where the trees are younger or thinner and, whilst they may not be adequate compensation for the loss of the open heath, they nevertheless provide interesting bird habitats.

The areas of grass and heather heath and pine and birch woodland in the Market Rasen and Woodhall Spa areas and in the district west and south-west of Lincoln are much less extensive and have fewer species which are characteristic of this type of habitat. Nightjars occur in all of them, however, and Tree Pipits are common, whilst Woodlarks have been recorded from the Lincoln and Market Rasen districts. Like those in the north-west, these areas of natural vegetation have shrunk very considerably since the advent of afforestation in the 1920's and 1930's and the drive for more arable land during and since the late war.

WOODLANDS

In the past the main areas of deciduous woodland in Lincolnshire were in south Kesteven, in the Ancholme and Witham valleys between Lincoln, Market Rasen and Tattershall and in the middle Marsh, along the eastern margin of the Wolds. Many of the woods, especially in the last two areas, consisted of oak with coppice of ash or hazel. During and since the second world war many of them have been clear-felled and in others much of the oak has been taken and coppicing has been neglected. Extensive replanting is now being undertaken both by the Forestry Commission and by private owners, but a greater variety of trees, including many conifers, is being used and the old type of standard oak with coppice will be much scarcer in future. Whilst it is certain that the new plantations will attract many woodland birds, it remains to be seen whether there will be more or less variety than formerly. Variety has indeed long been reduced by the loss of some



See over for Note.

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PLATE II—SCOTTON COMMON

PLATE II

An aerial photograph of Scotton Common as it is today. The greater part of this, the most extensive tract of heathland in north-west Lincolnshire, has been afforested during the last thirty years. Coniferous plantations of various ages and areas cleared for planting are conspicuous features of the photograph. In their early stages these plantations provide interesting bird habitats. A few parts of the Common, including areas with pools, have been left in a natural state, although drainage has lowered the water level considerably. In these areas nesting birds include two or three species of ducks, a few pairs of Curlews, Black-headed Gulls in large numbers and Nightjars. Near the south-east corner of the Common is the Lincolnshire Naturalists' Trust nature reserve, an area of about thirty-five acres consisting of birch and pine woodland and grass and heather heath with marshy patches.

of the larger birds of prey. Tawny Owls, Sparrow Hawks and Kestrels still nest in fair numbers, Long-eared Owls more rarely and locally; but the Buzzard, the Hobby and the Kite, which nested in many woodlands during the first half of the 19th century, have all gone. Persecution by game preservers undoubtedly reduced their numbers, but the shrinkage and increasing disturbance of the woodland areas were probably other important factors.

Mention has already been made of the new coniferous forests of the heathlands of the north-west and elsewhere. On the northern part of the Wolds the extensive woodlands of the Brocklesby estate have been planted by successive Earls of Yarborough from the middle of the 18th century onwards. There is considerable variety: coniferous plantations and woods of beech, oak and ash. These woods and the parkland and the several lakes of the estate have a wealth of birds which have been intensively studied for many years.

THE FENS

Even more complete in its transformation of the landscape and its bird life than the enclosure of the uplands was the drainage of the fens. The Holland and Witham Fens were finally drained during the second half of the 18th century, but it was not until the first decade of the 19th that the vast expanse of the East and West Fens was completely drained and brought under cultivation. Of the condition of the undrained fens of Lincolnshire, especially of the East Fen, we have many accounts. Arthur Young, writing in 1799, described a visit to the East Fen: "Sir Joseph Banks had the goodness to order a boat, and accompanied me into the heart of this fen, which in this wet season had the appearance of a chain of lakes, bordered by great crops of reeds". In his edition of Camden's *Britannia* published in 1806 Gough described the East Fen: "The East fen is quite in a state of nature, and exhibits a specimen of what the country was before the introduction of drainage. It is a vast tract of morass, intermixed with a number of lakes, from half a mile to two or three miles in circuit, communicating with each other by narrow, reedy straits". Gough also gives what is perhaps the best account of the birds of the fenland: "The Birds which inhabit the different fens are very numerous. Beside the common wild duck, wild geese, garganies, pochards, shovelers and teals breed here. Pewit, gulls and black terns abound, and a few of the great terns or tickets are seen among them: the great crested grebes, called gaunts, are found in the East Fen: the lesser crested, the black

and dusky, and the little grebe, coots, water hens, water-rails, ruffs, redshanks, lapwings or wypes, redbreasted godwits and whimbrels are inhabitants of these fens ". We know too that Bitterns and Bearded Tits nested there and perhaps Marsh and Montagu's Harriers and Savi's Warblers, and doubtless there were Snipe and Reed and Sedge Warblers and Reed Buntings and other species in abundance. Avocets too nested in coastal districts and Gough speaks of vast numbers of them around Fosdyke. It is evident that the fenland provided a variety of habitats for among the above are birds of open water, shallow meres, reed beds and rough grassland or heath. There was also doubtless much carr of willow and alder and the higher and drier parts of the peat fen probably had pine, oak and birch scrub which had its own characteristic bird fauna. Not only was there great variety of birds in the old fenland, but there was also great quantity, both of breeding and of migrant and wintering birds. Wildfowl in particular occurred in vast numbers. The ten duck decoys in the East Fen are said to have sent as many as 31,000 ducks to the London market in one season about 1800.

Today nothing is left of the natural fenland; the reclamation has been complete. At first much of the land was put down to grass and carried great numbers of cattle and sheep, but now almost every field is under the plough. The washes of the Welland, strips of rough meadow which often flood in winter to take excess water, still attract numbers of ducks and marsh birds, some of which breed there; and Pink-footed Geese feed in large numbers in several areas on potato, stubble and wheat fields. In the southern part of Holland there are many new orchards and on the old silt banks where most of the villages are situated there are more hedges and trees and gardens which attract a variety of birds. Indeed many woodland species occur sparsely in these areas. Along the margins of the Fens in parts of the peat areas, as around Friskney in the north and the Deepings in the south, there are a few small patches of woodland—often the sites of old duck decoys—and occasional remnants of fen carr, which provide interesting habitats. But in the open Fen, where arable cultivation is intensive and natural vegetation is scarce, the bird life is certainly less varied, though it is not so meagre as is often supposed and with geese, gulls, Lapwings and other species the total population may be considerable.

Like the Fens, the Isle of Axholme in north-west Lincolnshire was formerly an area of vast swamps and moorlands where, until it

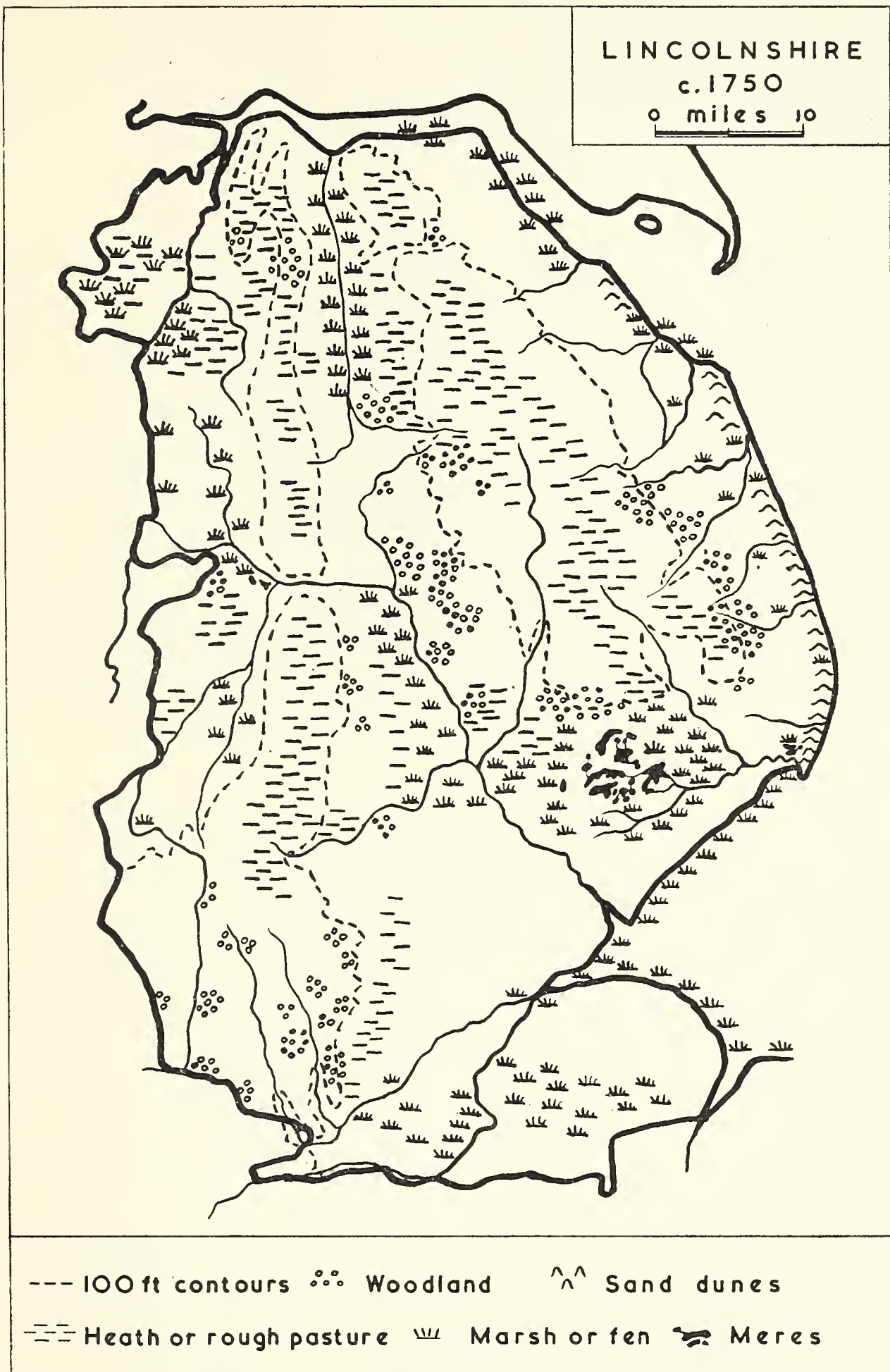


FIG. 1. Map showing the principal bird habitats in Lincolnshire c. 1750.

was finally drained in the late 18th and early 19th centuries, Marsh Harriers, Bitterns, Ruffs, Avocets and other marsh birds nested. As in the Fens, the reclamation of the Isle of Axholme has been complete and all but one or two insignificant remnants are now intensively cultivated.

MARSHES

River and coastal marshes as distinct from fens were much more extensive until the late 18th century and indeed for much of the 19th. The valleys of the Trent and the Ancholme, Humberside and the eastern Marshland once had great tracts of rough, marshy land which was flooded in very wet weather. In addition to migrant and wintering wildfowl and waders, there was doubtless a variety of breeding birds including some species like the Bittern and perhaps the Ruff which are known to have nested in the Fens and the Isle of Axholme. Today there is little true marsh left in these and other low-lying areas, but patches of rough pasture remain here and there and attract nesting Snipe and Redshank, Sedge Warblers and Reed Buntings. Yellow Wagtails are also birds of these lowland pastures, as of Fenland arable fields, but their distribution in Lincolnshire is uneven.

LAKES, PONDS AND STREAMS

Apart from the Humber and the Trent, Lincolnshire has no big rivers. Until they reach their tidal stretches neither the Witham nor the Welland are very large and the other so-called rivers like the Bain, Freshney, Great Eau, Steeping, Slea and Glen are little more than fair-sized streams. These flow down from the chalk and the limestone hills into the Marsh and Fen. The drainage of these latter regions has necessitated the making of many drains, large and small. Where there are suitable sites Kingfishers nest by many of the streams; Herons fish in them and in the drains, Grey Wagtails frequent them in winter, and, in spring and autumn, migrant waders like the Common and Green Sandpipers feed on their banks.

In contrast with the past, there are now very few large stretches of water in Lincolnshire. There are two small reservoirs at Denton and Revesby, a good many ornamental lakes, and clay and gravel pits of varying sizes as well as several large ponds in the heath district of the north-west. Many of these, especially the more secluded of them, are attractive to a variety of nesting birds and to migrant and wintering wildfowl and other water birds. Among other species, Great Crested

Grebes nest on most of the larger waters, as do Mallard and sometimes Teal and other species of ducks where there is waterside cover. Many lakes and ponds also have reed-beds where Sedge and Reed Warblers nest. The Water Rail probably breeds in several such places, though very few nests have actually been found in the county. In reed-beds surrounding extensive clay pits along the Humber bank a few pairs of Bitterns have nested for several years. On two of the ponds of the north-western heath district are large colonies of Black-headed Gulls. Ponds caused by gravel excavation often have sand or gravel margins and in at least one such place in the county Little Ringed Plovers have nested in recent years. A few pairs of Common Terns also nest at one gravel pit many miles inland. Like the streams, the lakes and ponds provide food for Herons and Kingfishers and other waterside birds, and rare species are occasionally seen by them, like the two Purple Herons which frequented one of the Brocklesby lakes in the summer of 1952. Reed-beds are also the roosts of Starlings, Pied Wagtails and migrant Swallows and martins. In addition to their reeds, many lakes and pits are surrounded by rough and marshy ground with thorn and willow scrub. Among other marsh birds, the Grasshopper Warbler is found in this type of habitat.

THE COASTLINE

The physical changes which have taken place on the Lincolnshire coast during the last hundred years have not affected to any great extent the more important bird habitats. On the dune coast between Mablethorpe and Skegness, where there has been serious erosion, the sandy beach has for many years been too narrow to attract breeding birds and there are no suitable feeding grounds for large numbers of migrant waders. Round the shore of the Wash reclamation of areas of salt-marsh has continued but further accretion is constantly in progress there. It is the growth of the seaside resorts and the advent of the motor-car which have most seriously affected the birds of the coast. Increasing numbers of holiday-makers have come to the Lincolnshire coast during the last fifty years, not only to Cleethorpes, Mablethorpe and Skegness, but to many other places once remote and unfrequented. At the beginning of the present century the dunes and beach at Humberston were such an area. There were two colonies of Little Terns, numerous pairs of Ringed Plovers, Lapwings and Red-shanks and, most notable of all, a few pairs of Kentish Plovers, an occurrence described in the following List. Since that time the area

has become a popular resort of holiday-makers, and bungalows and caravan camps have sprung up in the vicinity. A few pairs of Little Terns and Ringed Plovers still attempt to nest but have little success.

Elsewhere along the coast between Mablethorpe and Cleethorpes there is a line of dunes or an artificial seabank fronted by salt-marshes and mud and sand flats which are frequented by many shore birds in winter and during migration seasons. In the area of Saltfleet and Theddlethorpe the dunes are rather more extensive and at one point there is a wide hollow between two dune ranges. This contains fresh-water pools and marshy areas attractive to a number of marsh birds both as a nesting and as a feeding place. A few pairs of Little Terns, Ringed Plovers and one or two pairs of Oystercatchers nest on the shore in this area from time to time, and Sheld Ducks nest in the dunes all along this north-east coast which has also long been famous for the quantity and variety of migrant birds which occur there.

South of Skegness, between Seacroft and Gibraltar Point, there is by far the most extensive area of sand-dunes in the county and one which has grown considerably in the last hundred years or so. Thanks to the foresight of the authorities responsible for it, it has been preserved in its natural state and, although much more accessible than formerly, it is still relatively undisturbed. The greater part of this area of dunes and marshes is now a nature reserve established by the Lindsey County Council under the National Parks Act of 1949 and by the Skegness Urban District Council. The management of the reserve is undertaken by the Lincolnshire Naturalists' Trust which in 1949 opened a bird observatory and field research station at Gibraltar Point. Sheld Ducks, Little Terns, Ringed Plovers, Oystercatchers, Redshanks and many commoner species nest regularly within the reserve, whilst Arctic Terns and Short-eared Owls do so from time to time. Thousands of migrant passerine birds of many species pass through the reserve, whilst vast flocks of migrant and wintering waders and other shore birds, which feed on the sand and mud flats and salt-marshes over a wide area of the Wash, rest on the upper beach in the reserve at high water of spring tides. Salt-marshes, here as elsewhere on the Lincolnshire coast, are the winter resort of finches, Rock Pipits, Snow Buntings and other species.

The shore of the Humber and the Wash consists of extensive tidal sand and mud flats and salt-marshes and there are many offshore



See over for Note.

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PLATE III—SKEGNESS AND GIBRALTAR POINT NATURE RESERVES

PLATE III

This aerial photograph shows the eastern part of the Gibraltar Point Nature Reserve and the Skegness Nature Reserve to the north of it. The alignment of the coast and the process of sand-dune formation can be well seen. Some of the higher beach ridges are the nesting places of Ringed Plovers, Oystercatchers and Little Terns. They are also the resting places at high spring tides of thousands of waders of various species. Following the marram grass and other early plant colonisers comes the shrub, sea buckthorn, the extensive patches of which are conspicuous on the photograph. Sea buckthorn scrub provides nesting sites for several species of small passerine birds and abundant cover for migrants, whilst its bright orange berries are eaten in winter by thrushes, Hooded Crows and other birds. Sheld Ducks nest in several places on these older dunes. Where sea buckthorn is absent the dunes are covered with marram grass, sand sedge, dewberry, mosses and other plants and there are scattered elder bushes. The bird observatory is situated in such an area at the end of the line of elders at the south end of the reserves where the westward sweep of the dunes forms the promontory of Gibraltar Point. The eastern part of the main salt-marsh of the Gibraltar Point Reserve appears in this photograph. It floods only at the highest spring tides and is the nesting place of Lapwings, Redshanks, Skylarks, Meadow Pipits, Linnets, Reed Buntings and occasionally other species. In winter Skylarks, Rock Pipits, Snow Buntings and occasionally Shore Larks feed here and on the salt-marsh strips between the outer dune ridges. When flooded these salt-marsh areas are attractive to those migrant waders which prefer salt-marsh pools to the open shore.

banks. In the Wash, the saltings of glasswort, sea blite, sea aster, rice grass and other plants are intersected by a network of creeks and contain many pools. On their outer edges eel grass (*Zostera*) grows sparsely in some areas and there is much *Enteromorpha*, a species of alga. There are mussel beds too, especially where patches of shingle occur, and there are cockle beds in areas which are chiefly sandy. At two places on the Wash marshes there are colonies of Common Terns and Black-headed Gulls, whilst Redshanks are numerous everywhere. Thousands of migrant and wintering waders feed on the flats and marshes, as do flocks of Wigeon and Brent Geese. Other species of ducks as well as divers, grebes and various sea birds frequent the waters of the Wash and the river estuaries outside the breeding season. There is much less salt-marsh on the Humber shore, and, in general, less variety of habitat, but the river and its tidal flats are also the resort of large numbers of wildfowl and waders. Tidal flats both here and in the Wash provide roosts for Pink-footed Geese which feed inland.

Reclamation of salt-marshes round the Wash has been going on for centuries. It has been and still is a piecemeal process, though in recent years with the aid of modern machinery it has been possible to reclaim larger areas at a time than formerly and the process will probably be speeded up considerably in the future. For the first two or three years and sometimes longer, these reclaimed areas are left in almost their natural state, but there is a gradual change of vegetation to a grassland type as the salt leaches out and the land becomes drier. Whilst in this condition such areas are attractive to a variety of birds: to Short-eared Owls, harriers and Kestrels for hunting, to Sheld Ducks, Mallards, Redshanks and occasional Oystercatchers for breeding, and to Curlews and other waders, as well as to small passerines, for roosting. Inside the new banks large drains are made and these attract many waders and some wildfowl, especially Goldeneye. The same applies to the borrow-pits on the seaward side but these silt up again quite quickly. The banks themselves being made near the outer edge of the saltings serve the valuable purpose of allowing observers to view the mud flats and the sea at high tide.

TOWNS, VILLAGES AND BUILDINGS

Most Lincolnshire towns and villages have plenty of buildings with suitable nesting sites for Swifts, Swallows and House Martins. Pantiled roofs are particularly suitable for Swifts and many small towns and villages have a large population of these birds. Modern

farm buildings do not on the whole provide such suitable nesting sites for Barn Owls, Swallows, and Pied Wagtails as did the older type of building in which special openings were sometimes left for Barn Owls. As E. M. Nicholson has pointed out in his book *Birds and Men*, the gradual disappearance of the farmyard pond, more hygienic conditions in the cowshed and the use of sprays for insect control may well have an adverse effect on the numbers of both Swallows and Pied Wagtails in future years.

Certain types of sewage-farms provide excellent feeding-grounds for numerous species of birds, especially migrant waders. There are several sewage-farms of this type in Lincolnshire and, whilst all of them are comparatively small, they are visited by several species of waders, some of which are otherwise rarely seen inland in the county.

BIRDS AND MEN

By the changes he has made in the landscape man has destroyed many bird habitats, but he has also created new ones. Whilst the loss of the natural fenland and the open heath of the uplands and the blown-sand country is irreplaceable, it must be remembered that the 18th and early 19th century advances in agriculture which brought about most of these changes were also responsible for the Enclosures and for the laying out of large estates and thus for the planting of more hedges, hedgerow trees and woods and for the making of many parks and lakes. At the present time hedges and hedgerow trees are becoming scarcer as a result of further changes in agricultural methods and practices, and their continued destruction cannot but have a serious effect on the quantity and variety of bird life in the districts concerned. At the same time various new habitats have been created in recent years in the shape of clay and gravel pits, coniferous woods and gardens. Even the swallowing up of countryside by the growth of towns has some compensations as far as bird habitats are concerned in the creation of many new gardens with hedges, trees, shrubs and lawns, although these are often infested by too many cats.

In Lincolnshire many areas of countryside have been cleared of hedges and trees to make aerodromes. Rough ground on the edges of these attracts various birds to nest, and in winter there are often flocks of Lapwings, gulls, Starlings and finches on the open grassland, though birds are not welcome on aerodromes since in flight

they present serious dangers to aircraft. The bombing ranges on the Lincolnshire coast have not perhaps caused such a serious disturbance to birds as was feared, but the increasing practice of dropping brilliant flares for night bombing and, above all, the advent of the jet aeroplane are making these ranges a much greater source of disturbance than they have been in the past. The jet aeroplane with its higher-pitched and more intensive noise undoubtedly has a most disturbing effect on birds, especially in low-flying areas on the coast which are the resort of flocks of wildfowl and waders.

There are other changes in agricultural methods which are also likely to have an adverse effect on some species. It is generally accepted that the increased use of machinery and the earlier cutting of hay were at least contributory factors in the decrease and eventual disappearance of the Corncrake over most of England. It has been suggested that the widespread decrease in the number of breeding Lapwings has been caused largely by the increase in ploughland in recent years. The birds much prefer this to grassland for nesting, but they have little success on it owing to the various operations of drilling, harrowing and rolling which are more intensive now than formerly.

More disturbing is the effect which the increasing use of poisons, chiefly for crop-spraying, is likely to have on bird populations. Already there have been instances from other counties of heavy mortality among birds as a result of this practice. In Lincolnshire there is strong suspicion that the heavy mortality among Barn Owls reported from time to time may have been caused by the birds taking poisoned but still living rats and mice. It is hoped that every effort will be made by all concerned to avoid damage to both bird and beneficial insect life from the use of poisons to exterminate pests.

Mention might also be made here of the oil pollution of the seas which is responsible for the death of many thousands of birds round the coasts of the British Isles every year. Lincolnshire coastal waters do not appear to suffer from oil pollution as badly as some, but numbers of oiled divers, grebes, petrels, Gannets, ducks, auks and gulls are reported from our coast every winter. Those found alive seldom recover. It is hoped that steps now being taken to find a solution to this appalling problem will be successful.

Game preservation has in the past been largely responsible for the reduction and even extermination of some of the larger birds of prey.

There is still in Lincolnshire a good deal of unnecessary and unjustifiable persecution of even such harmless or beneficial species as Kestrels and owls and scarce visitors like Buzzards and Honey Buzzards. A vermin pole in North Lincolnshire in April, 1947, displayed the corpses of five Kestrels, thirteen Barn Owls, four Little Owls, seven Tawny Owls, three Long-eared and two Short-eared Owls. Fortunately, however, most game preservers these days pursue a more enlightened policy towards birds of prey and it is hoped that this will become universal. Game preservation had in the past effectively kept down the numbers of Magpies, Jays and Carrion Crows in most parts of Lincolnshire, but with fewer gamekeepers in recent years these species have increased in some districts to an undesirable extent. It is possible that this increase would never have taken place had not the larger birds of prey been so drastically reduced by game preservers in the past.

During the last fifty years or so there has been a serious decline in the numbers of many species of European wildfowl which visit Britain on migration and during the winter. Destruction and disturbance of their habitats on breeding-grounds, migratory routes and winter quarters are probably the most important causes of this decline. In Lincolnshire, as already observed, parts of the coast once remote and inaccessible can now easily be reached from long distances by motor-car and motor bicycle. This has undoubtedly encouraged a great increase in the number of wildfowlers and, whilst it is not yet possible to assess with certainty the effect of the number shot on the populations of certain species of wildfowl, such as the Pink-footed Goose, it is evident that the disturbance caused by excessive shooting causes a decrease in the numbers of wildfowl frequenting the areas concerned. It is in the interest of naturalists and wildfowlers alike that steps be taken to ensure the maintenance of adequate stocks of wildfowl of all species.

Bird protection laws in this country have been hopelessly confused and in many respects largely ineffective, but they have not been without beneficial results. They have probably acted as a check—if only a slight one—on the wanton destruction of rare and beautiful birds. They have given some much needed protection to wildfowl and waders by making a close season. They helped to put a stop to the practice of killing and trapping some species for food, plumage or caging. The Goldfinch and Great Crested Grebe probably benefited in this way and the protection extended to the Lapwing and many other species of

waders largely brought to an end the trapping of great numbers of these birds in Lincolnshire coastal districts. In recent years the bird protection orders of the Lindsey and Kesteven County Councils have been among the best in the country. Nevertheless the various Bird Protection Acts are extremely complicated and difficult to operate, and it is encouraging that simpler and what promises to be more effective legislation is being introduced*. The most effective means of bird protection is, of course, a sympathetic and enlightened public opinion and it is this which all naturalists and their organisations must seek to promote.

Many of our commoner species of birds seem well able to adapt themselves to changing environments. There seems no reason, moreover, why the variety and numbers of our woodland birds should not be maintained provided there is always plenty of deciduous—especially oak—woodland with some shrubs and herbs. The most urgent need is undoubtedly to secure the preservation of some of the scarcer habitats, notably in this county stretches of sandy seashore and dunes, the remaining patches of heath and some of the clay and gravel pits with their surrounding reed-beds and other waterside vegetation. In this connection the establishment of the Skegness and Gibraltar Point nature reserves, already mentioned, is a most important development. The Lincolnshire Naturalists' Trust, which has played a leading part in this, was established in 1949 for the purpose of promoting the conservation of nature in the county by the establishment of reserves and other means. In addition to its work at Gibraltar Point, the Trust is seeking to safeguard more than twenty other sites in the county, many of which include examples of the above-mentioned habitats and have interesting bird populations. In this and in its general work of bird protection the Trust urgently needs the support of all who value birds for their interest and for their beauty.

Man's activities have certainly created many factors which affect birds adversely, and these are naturally more serious in the case of the rarer and less adaptable species. But in seeking to maintain the quantity and variety of our bird life we should be encouraged by the words with which E. M. Nicholson closes his book *Birds and Men*: "Yet the close and growing similarity between the interests of birds and people in the shaping of the landscape

* **The Protection of Birds Act, 1954**, came into force on 1st December, 1954.

encourages a hope that with intelligent and imaginative study Britain can be much improved as a habitat for both”.

NATURAL CHANGES IN BIRD POPULATIONS

Not all changes in bird distribution and status can be ascribed to the activities of man. Changes do occur which appear to be entirely natural or only partly caused by man. Among these are the decrease in Lincolnshire and in many other areas of such birds as the Spotted Crake, the Wryneck, Stonechat and Whinchat, the increase and extension of range of the Redshank, the appearance of the Little Ringed Plover, and the increasing inland occurrence of some of the gulls. There are likewise certain problems of distribution which cannot be explained by reference to man's activities. The Nuthatch, for example, is confined to the south-west corner of the county, although there appear to be equally suitable habitats for it elsewhere.

The investigation of these and of the changes caused by man's activities must be one of the main tasks of Lincolnshire ornithologists in future years not only for its own scientific interest, but in order that wise policies of conservation and, where necessary, control may be devised and applied.

CHAPTER II

BIRD MIGRATION IN LINCOLNSHIRE

Lincolnshire, with its long coastline fronting the North Sea, is particularly well suited for the observation of bird migration. Although the British Isles receive only the fringe of that vast seasonal shift whereby the great spaces of the Palaearctic north drain their breeding populations into southern Europe, Africa and southern Asia for the winter, yet to stand on the Lincolnshire dunes on a day of strong passage and to watch the Meadow Pipits and Skylarks, the Swallows and martins, streaming past at the rate of hundreds an hour for hours on end, gives a vivid impression of the immense scale of migration and of the intensity of the impulse that drives the birds onward to their destinations.

Britain is so situated that it lies within the winter range of some birds and within the summer range of others. Lincolnshire, therefore, has its quota of winter and summer visitors, which are present only during those seasons. Some species also are partial migrants, part of the population migrating while others remain as residents all the year round. Others move about the country during the winter, but these movements appear to follow no definite pattern and cannot be classed as true migration. But by far the greatest number of migrants are passage birds that spend only a few brief hours or days here before passing on to a more distant destination. Each species has its own principal times of migration and these are indicated in the List.

The physical features of the county, which have already been described, have their effect on the routes taken by migrating birds. Although these move usually on a broad front, they use certain physical features such as coastlines, river valleys and hill ranges as guiding lines and along these larger numbers are concentrated. In Lincolnshire the coastline to the east, the Humber estuary to the north, and the Trent valley to the west are important lines of concentration. The importance of the Wold and limestone escarpments has hardly been studied and they would repay careful watching. The Wash seems to be an important area of local assembly for birds which move into it both down the Lincolnshire coast and

westwards along the north Norfolk coast during both the spring and autumn migrations. From here, it seems likely that the Wash rivers guide the birds further on their journey, and their significance is being worked out and is providing another fruitful field for study. These physical features are important but their importance must not be over-emphasised. Although they concentrate the birds and so provide the most spectacular movements, there is no doubt that a great deal of migration takes place across country on a broad front and for that reason is less easily observed.

It should be realised also that, in spite of the impressiveness of a large movement of diurnal migrants, what is actually observed is only a small part of the whole. A great many species migrate only at night, others do so skulkingly moving from bush to bush. Moreover, in certain weather conditions, diurnal movement may take place at a height where it is not observed. And much migration, particularly the south-westerly coastal passage along the Lincolnshire coast, usually takes place for only a few hours after dawn and by mid-morning has ceased or become a mere trickle.

The following paragraphs are an attempt to summarise our present knowledge of migration in Lincolnshire, but it must be realised that that knowledge is, as yet, very imperfect. Hard facts are slowly accumulating, but much is still conjecture and inference and many of the problems of migration remain unsolved.

AUTUMN MIGRATION

A. ORIGIN

The autumn migration of birds is a shift of population away from breeding-grounds in the north that cannot support the same numbers of birds during the cold months of winter. This movement is not entirely a north to south one. The influence of the Gulf Stream on the western Palaeartic region is such as to push northwards the cold weather line on the Atlantic seaboard, and for this reason there is a strong westerly element in the population shift.

The chief areas from which migrants reach Britain are:—

- (1) Scandinavia
- (2) The Baltic, Germany and the Low Countries
- (3) Greenland, Iceland and the Faeroe Islands

During the last half century the technique of bird-ringing has given us factual evidence of the movements of birds. In Table I is

TABLE I

OCCURRENCES IN LINCOLNSHIRE OF BIRDS FROM ABROAD.

<i>Species</i>	<i>Evidence of breeding ground</i>	<i>Birds occurring on passage or outside breeding season</i>
Heron	S. Sweden	
Garganey		Belgium
Wigeon		S. Central Russia
White-fronted Goose	Greenland and typical races	
Pink-footed Goose	Iceland, Greenland	
Sparrow Hawk	Norway (2),	N. Denmark
Peregrine	N. Norway	
Lapwing	Scandinavia, Baltic, Low Countries, Hungary (Fig 4)	
Ringed Plover	Arctic race	
Curlew	Finland, Sweden (3) Holland	
Bar-tailed Godwit		Norway (8 days earlier)
Redshank	Icelandic race	
Knot		S. Norway, N. Germany
Dunlin	Denmark	S. Norway, Sweden (2)
Great Black-backed Gull	W. Norway	
Lesser Black-backed Gull	Scandinavian race	
Herring Gull	N.W. Russia, Holland	
Common Gull	Norway, Sweden, Denmark	
Little Gull	Sweden	Denmark (wintering)
Black-headed Gull	Norway, Sweden, Den- mark, Schleswig- Holstein; Mediterranean species	
Common Tern	Finland, Sweden, N.W. Germany	
Long-eared Owl	Holland	
Great Spotted Wood- pecker	Northern race	
Hooded Crow	Sweden	
Rook	E. Prussia	
Treecreeper	Northern race	
Song Thrush	Continental race	
Redwing	Icelandic and typical races	
Blackbird	Schleswig-Holstein, S. Sweden	S. Norway, Denmark, Heligoland (Fig. 5)
Wheatear	Greenland race	
Robin	Continental race	
Lesser Whitethroat	Siberian race	
Goldcrest	Continental race	
Dunnock	Continental race	
Pied Wagtail	Continental race (<i>i.e.</i> , White Wagtail)	
Yellow Wagtail	Continental race (<i>i.e.</i> , Blue-headed Wagtail)	
Starling	Norway, Holland (Fig. 4)	Holland, Heligoland.
Chaffinch		Holland
Redpoll	Northern race (<i>i.e.</i> , Mealy Redpoll)	

NOTE: Fuller details of most of these occurrences are in the List.

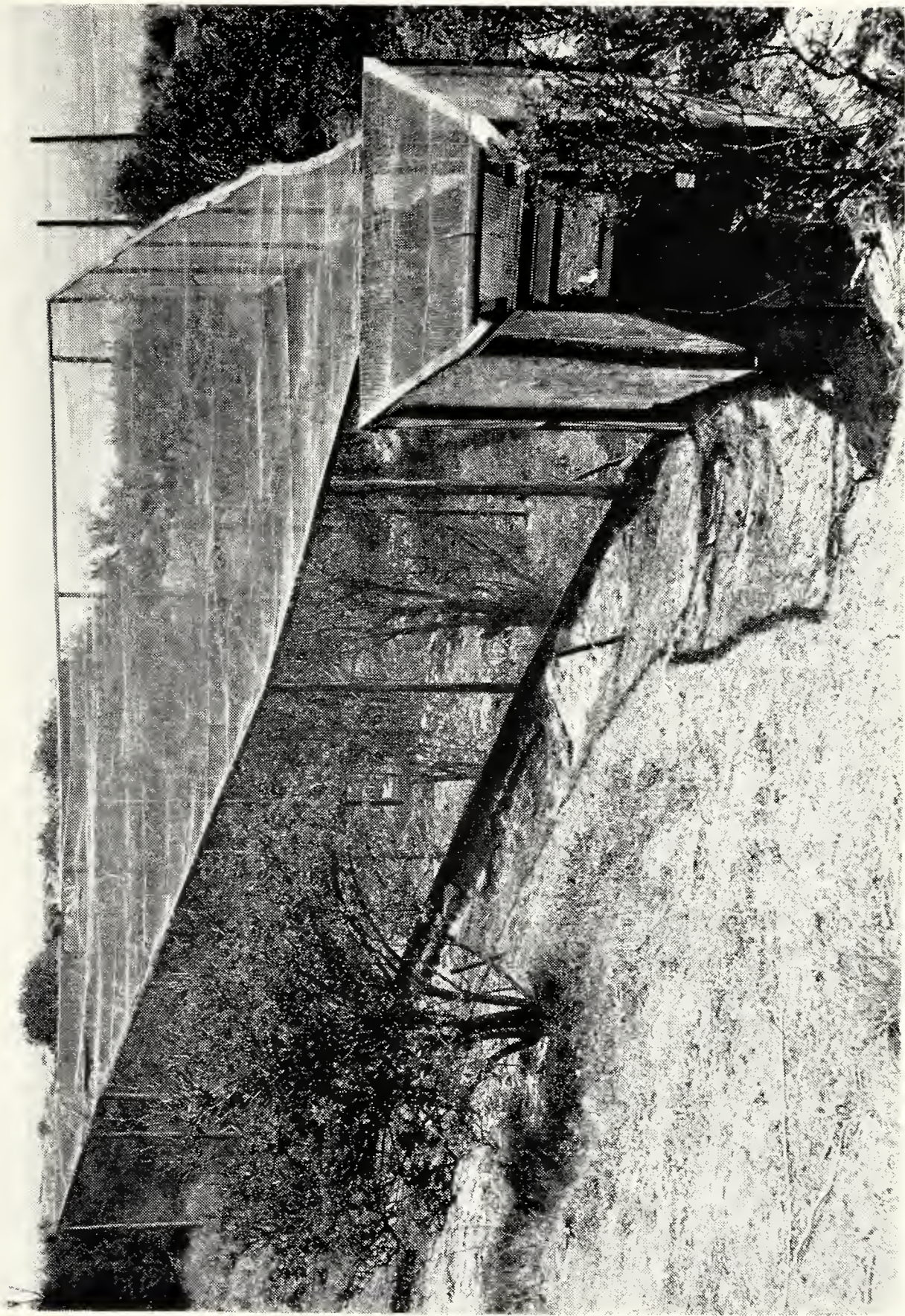
given a summary of the recoveries of such ringed birds and of the occurrences of geographical races that provide evidence of the movements of birds from abroad to and through Lincolnshire. Besides these species there are many others which, by inference from recoveries in other counties and from critical examination of geographical races, it is safe to conclude come from the same areas.

(1) *Scandinavia*

Britain receives from Scandinavia many winter visitors such as Fieldfares and Redwings. But by far the greatest numbers of birds of Scandinavian origin are passage migrants on their way through to winter quarters further south. The numbers of these passage migrants actually reaching Britain in any particular autumn is very dependent on weather conditions. The main passage migration takes place along the Continental coasts, and it is only when easterly winds 'drift' the birds westwards across the North Sea that large numbers reach our shores. Night migrants, which make less use of visual aids to navigation such as coastal guiding-lines, are more subject to 'drift' of this kind than are diurnal migrants. When conditions leading to 'drift' occur suddenly very large numbers of birds may reach Britain's east coast simultaneously. An example of this was the huge influx of Continental Robins (night migrants) that reached Britain from Shetland to the Thames in the first few days of October, 1951. Lincolnshire with its long North Sea coast-line is very favourably placed for the reception of these 'drift' migrants both directly and at second-hand, birds which reached Britain further north later following the coastline southward. The true winter visitors are far less affected by weather, though the actual date of their arrival may be postponed by adverse conditions.

(2) *The Baltic, Germany and the Low Countries*

The majority of birds reaching Britain from this area are winter visitors rather than passage migrants. The origin of Lapwings wintering in Lincolnshire is shown in Fig. 4. Skylarks, Chaffinches, thrushes, Rooks and Starlings, in particular, come from a wide area of northern and central Europe. Here the strong westerly element in the population shift is clearly seen. Some passage migrants from the more westerly part of the range become involved in trans-North Sea drift and, if this is prolonged, birds from further east may also be affected. Such rarities as the Yellow-browed Warbler and



See over for Note.

Photograph by courtesy of 'The Grimsby Telegraph'.

PLATE IV—HELIGOLAND TRAP, GIBRALTAR POINT

PLATE IV

The main Heligoland trap at the Gibraltar Point Bird Observatory. The trap is situated in a hollow at the southern end of the eastern range of sand-dunes of the Gibraltar Point Nature Reserve. Elder bushes provide cover for migrants. Since 1949, when the trap was constructed, an average of about 1,300 birds have been captured in it each year for examination and ringing.

Siberian Lesser Whitethroat, which have breeding ranges far to the east, have been recorded in Lincolnshire.

(3) *Greenland, Iceland and the Faeroe Islands*

Migrants originating from this area are, as would be expected, most commonly recorded on the western side of Britain. But Pink-footed Geese ringed on their breeding grounds in Iceland have been recovered in Lincolnshire, and the Icelandic races of the Redwing and Redshank and the Greenland races of the Wheatear and White-fronted Goose have all been recorded in the county. It is probable that birds of other species, which cannot be racially differentiated, also come from the same direction.

(4) *Other parts of Britain*

Recoveries of birds in Lincolnshire in winter that were ringed in other parts of Britain are shown in Table II. It will be seen that these come from all directions and many of the movements are probably in the nature of winter dispersal rather than true migration.

TABLE II

OCCURRENCES IN LINCOLNSHIRE IN WINTER OF BIRDS RINGED IN
BRITAIN

<i>Species</i>	<i>Evidence of breeding ground</i>	<i>Ringed on passage in</i>
Cormorant	Northumberland	
Heron	Bedfordshire (3), Oxfordshire	
Teal		Pembrokeshire, Dorset (wintering), Northants
Wigeon		Pembrokeshire, Suffolk (wintering)
Kestrel	Warwicks, E. Yorks	
Oystercatcher	Norfolk (Salhouse)	
Ringed Plover	Norfolk (Scolt Head)	
Great Skua	Shetland (Hermaness)	
Lesser Black-backed Gull	Lancashire	
Herring Gull	Forfar, I. of May, Northumberland	
Black-headed Gull	Cumberland	
Razorbill	I. of Man, Pembs (Skokholm)	
Woodpigeon	Yorkshire	
Song Thrush	Bucks, Norfolk, Durham	Yorkshire (Spurn Pt.)
Blackbird		Yorkshire (Spurn Pt.)
Tree Sparrow	Staffordshire	

B. DIRECTIONS INSIDE THE COUNTY

The most important directions taken by migrating birds in Lincolnshire are:

(1) North to South, concentrating along the coastline on the east and the Trent Valley on the west.

(2) East to West, concentrating along the Humber estuary and the southern shore of the Wash and also crossing the county on a broad front.

(1) *North to South.* Concentration along the coast provides some of the most spectacular migration to be seen in Lincolnshire. But because of the direction taken by the coastline this concentration is only observed in the middle part of the county. At North Cotes

Caton Haigh regarded the north to south movement as of minor importance, whereas at Gibraltar Point it is by far the most noticeable. The species principally involved are Skylarks and Meadow Pipits, finches of several species, the hirundines and Swifts, all strong-winged diurnal migrants. At the same time the weaker-winged migrants—warblers, flycatchers, Redstarts, Goldcrests—which make their chief journeys by night are moving in the same direction, but skulkingly and from bush to bush, feeding as they go. The movements of diurnal migrants take place usually on a narrow front and at no great height. They usually start soon after dawn and last for a few hours only, the stream becoming by mid-morning a mere trickle. They almost always take place when the wind is between south-west and south-east. Northerly and westerly winds inhibit them almost completely.

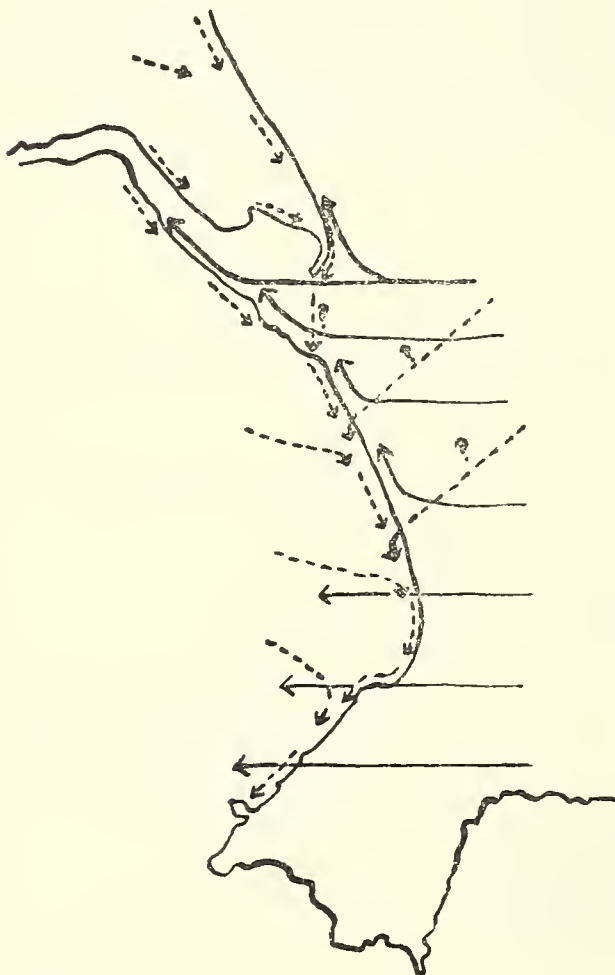


FIG. 2

Directions of autumn migration on the Lincolnshire coast.

Solid lines—winter immigrants from the east.

Broken lines—coastal passage migrants.

Parallel to this southerly coastal movement it is probable that migration takes place inland on a broad front and concentration is again found in the Trent valley to the west of Lincolnshire. An instance of this inland migration is provided by a Swallow ringed as a nestling near Bradford, Yorkshire, recovered a few weeks later near Market Rasen. It is probable that 'drifted' passerine night migrants of Continental origin keep to a very narrow front along the coast line, the inland migrants being British-bred birds.

The immediate origin of the birds comprising this passage is still largely a matter for conjecture. A Willow Warbler ringed on the Isle of May on July 24th, 1948, was retrapped a fortnight later at Spurn Point. A Song Thrush ringed at Spurn on August 30th, 1952, was retrapped at Gibraltar Point six days later and a Spurn-ringed Blackbird also occurred at Gibraltar Point but in the following autumn. A Robin ringed at Spurn was recovered in Grimsby a few days later. These records seem to indicate—and it is what one would conjecture on theoretical grounds—that birds reaching the east coast of Britain whether from Scandinavia, as 'drift-migrants', from the north-west or from inland in Britain follow the coast southwards. On Humberside the main autumn movement of hirundines and Swifts is to the south-east following the coast-line and these birds, no doubt, join the southerly stream of birds from further north. It is to be hoped that the establishment in recent years of a chain of bird observatories along the east coast (Fair Isle, Isle of May, Monk's House, Spurn Point, Gibraltar Point, Cley, Dungeness) will bring further factual information.

FIG. 3



Link-up by river valleys between the Wash and the Severn

The routes taken by these southward migrating birds after they leave Lincolnshire is also a matter for conjecture and, so far, ringing recoveries have thrown no light on the problem. It seems likely that the Wash rivers may act as important guiding lines; at any rate the

birds do not follow the coast of the Wash right round, autumn movement on the north Norfolk coast being westward into the Wash. Fig. 3 shows the possible link-up by river-valley routes between the Wash and the Severn estuary, but no proof exists that Lincolnshire migrants follow this route, and much of the further movement may be across country on a broad front.

Sometimes at Gibraltar Point certain species may be seen diverging from the main stream of birds, which follows the coast to the south-west, and setting out across the mouth of the Wash towards Norfolk in a south-easterly direction. But again their further movements are unknown.

(2) *East to West.* Equally important is the movement into the county from the east. In the middle part of the county, where the coastline lies at right angles to this east-to-west line of movement, the migration, being less concentrated, is usually less spectacular than the southerly coastal passage. But parties of birds, often large ones and sometimes continuing to arrive for several hours, may be seen coming in from due east over the sea, often at considerable height and usually passing straight inland, unless they are exhausted. Large movements from the east also take place by night. These movements occur usually in conditions of easterly winds and in the main rather late in the season. They may occur at any time of day or night. Along the southern shore of the Wash and further north in Lincolnshire, where the coastline turns into conformity with this line of migration, concentration takes place, and along Humberside the stream of birds moving north-westwards is quite as spectacular as the southerly coastal passage in the south. The principal species concerned are the crows, Starlings, Skylarks, finches, thrushes and Lapwings. All these are winter visitors to Britain and the movement is undoubtedly composed mainly of winter visitors rather than passage migrants, though the majority pass further inland and do not remain to winter in Lincolnshire.

The immediate origin of these birds is uncertain. The nearest point on the Continental coast, the Frisian Islands, is 220 miles due east. It is probable that many of the birds make the sea crossing direct, but many others may make the shorter sea-crossing further south, pass through Essex, Suffolk and Norfolk and, cutting across from north Norfolk, reach Lincolnshire. At North Cotes, Caton Haigh noted that, as well as immigration from the east and north-east,

FIG. 4



- Areas of origin of Lapwings wintering in Lincolnshire
- + Ringing localities of Starlings wintering in Lincolnshire
- x Wintering areas of Starlings ringed as breeding birds or passage migrants in Lincolnshire

FIG. 5



- + Occurrences abroad of Blackbirds ringed or recovered in autumn and winter in Lincolnshire
- x Wintering areas of Blackbirds ringed as breeding birds or passage migrants in Lincolnshire
- Wintering areas of Song Thrushes ringed as autumn passage migrants in Lincolnshire

the main direction taken by immigrants was from the south-east and then following the coastline to the north-west. At Gibraltar Point immigration is usually from due east.

(3) *Other movements.* Besides these marked directional movements there is evidence of other movement going on. Towards the end of July large numbers of terns collect in the Wash, probably originating largely from the Norfolk and Farne Islands colonies, and by early September they have gone. The numbers of waders—Knots, Dunlins, Sanderlings, Turnstones, Ringed Plovers, godwits—and of ducks and gulls increase at this season. Many of them remain to winter on the coast but the majority pass on to winter further south. In early October the Pink-footed Geese arrive on their wintering grounds. All over the countryside there is evidence of dispersal—flocks of finches on stubbles and in the stackyards, gulls and Pied Wagtails following the plough—and on the sea, auks, grebes, and Gannets, freed from the tie of their nesting colonies, wander far and wide and, in bad weather, are driven into coastal waters.

TABLE III

AUTUMN MIGRANTS RINGED IN LINCOLNSHIRE RECOVERED ABROAD

<i>Species</i>	<i>Where recovered</i>	<i>Remarks</i>
Song Thrush	S.W. France (2), Spain (3) (Fig. 5)	in winter quarters
Redwing	S. Italy	ringed December, re- covered January two years later
Redstart	S.E. France	three weeks later
Robin	S.W. France, N. France	in winter quarters
Whitethroat	N. Portugal	two years later
Willow Warbler	S.E. France (2), N. Spain	still on passage
Pied Flycatcher	Portugal	3 weeks later, still on passage

TABLE IV

WINTER RECOVERIES IN BRITAIN OF LINCOLNSHIRE PASSAGE OR
BREEDING BIRDS

<i>Species</i>	<i>Where recovered</i>
Heron	<i>Notts, Leics, Northants, Norfolk, Cambs.</i>
Woodcock	<i>Denbighshire.</i>
Great Tit	<i>Sussex (ringed in October, recovered following June).</i>
Blue Tit	<i>Suffolk.</i>
Wren	<i>Middlesex.</i>
Blackbird	<i>Renfrew, Peebles, Pembrokeshire, Shropshire, Co. Mayo (Eire), Co. Cavan (Eire). (Fig. 5)</i>
Starling	<i>Wilts, Notts, Yorks, Worcs, Flints, Lancs (2), Lancs (2), Cheshire (2), Co. Kilkenny (Eire). (Fig. 4)</i>

NOTE: Recoveries of Lincolnshire breeding birds in italics.

C. DESTINATIONS

The ringing of birds in Lincolnshire has only been carried out on any scale since the establishment of the bird observatory at Gibraltar Point in 1949. For this reason the factual evidence of the destinations of Lincolnshire migrants is as yet scanty. Table III shows those birds ringed at Gibraltar Point on autumn passage that have been recovered abroad either still on passage or in their winter quarters.

Some factual evidence is also available of the destinations in other parts of the British Isles of Lincolnshire passage or breeding birds, and these are shown in Table IV.

SPRING MIGRATION

In the spring the population shift is reversed and, as winter releases its grip, the northern breeding-grounds become repopulated. The British Isles receive back their summer visitors and also the western fringe of the great movement of Continental birds from their winter to their summer quarters.

Except in most unusual circumstances the spring migration in Lincolnshire is far less spectacular than the autumn movements. The summer residents reappear, but their coming is unseen and there are no mass movements to be observed. The birds, one presumes, make their way individually to their breeding grounds travelling along inland routes from the south of England.

Coastal passage is on a much smaller scale than in autumn. The reason for this is believed to be that passage movements along the east coast are composed mainly of birds that, aiming for their breeding-grounds in Scandinavia and north-west Europe, are 'drifted' off-course by easterly winds, exactly the same as in autumn. But in the relatively narrow southern part of the North Sea the weather conditions in which this 'drift' is likely to develop on any scale are rather exceptional and it is easier for the birds to keep to their true course along the Continental coast. Further north 'drift' occurs more easily and the numbers of 'drifted' passage-migrants recorded in spring at the more northerly bird observatories are usually greater. The exception to this rule of scarcity is the Chaffinch. In the second half of March there are often large-scale movements of this species. These are probably not 'drift' migrants but their origin and destination remains unexplained.

The direction of diurnal migration in Lincolnshire in spring shows one very surprising feature. At Gibraltar Point instead of the coastal passage being, as one would expect at this season, from south to north, it is almost invariably (as in autumn) from the north following the coastline south and then south-west. On the north Norfolk coast, too, the direction is the same as in autumn—westwards into the Wash. Further north in Lincolnshire the direction is more orthodox, being to the north-west along Humberside with occasional offshoots northwards across the Humber. At Spurn Point it appears confused, birds migrating in both directions. The principal species concerned are the hirundines and Swifts, finches especially Chaffinches, Skylarks, Meadow Pipits and Turtle Doves. The general pattern of movements is similar to that of the autumn but the numbers involved are very much smaller and often, even when weather conditions are apparently suitable, no passage occurs. The reason for this reversal of the expected direction is obscure and, so far, no ringing returns have thrown any light on it nor, in our present state of knowledge, would it be useful to hazard a theory.

One might also expect that just as in autumn immigrants are seen arriving from the east, so in spring they would be seen emigrating to the east. But, in fact, no such movements are observed. The only evidence of our winter visitors leaving is that the numbers seen diminish, and that certain species, obviously on return migration, occur in coastal areas for a while in spring.

About the end of June very large southerly movements of Swifts are noted in most years. These have also been observed on the Continent but, although various theories have been advanced to account for them, their significance remains obscure.

That some Lincolnshire birds return annually to their same breeding grounds is shown by the recovery in subsequent years at Gibraltar Point of no fewer than five Common Whitethroats.

CHAPTER III

LINCOLNSHIRE ORNITHOLOGY

Occasional references to the birds of the Lincolnshire fens are to be found in monastic and other records of the Middle Ages. Michael Drayton's *Poly-Olbion* of 1612, a long description in verse of the English counties, contains an account of the birds of both the Fens and the Wolds of Lincolnshire. The spectacular bird life of the undrained fens also attracted the attention of some of those 18th and early 19th century naturalists who played such an important part in the development of English ornithology. Both Pennant in his *British Zoology* (1771) and Montagu in his *Ornithological Dictionary* (1802) and *Supplement* (1813) describe the birds of the Lincolnshire Fens, and the account of them in Gough's edition of Camden's *Britannia* (1806) quoted in our first chapter was probably inspired by the writings of Pennant. The early minute books of the Spalding Gentlemen's Society, which was founded as early as 1710, contain many references to the natural history—including the bird life—of that area of the Fenland and would provide some interesting material for research. There is also a list of the birds of the fens and heaths of the Isle of Axholme in Stonehouse's *The History and Topography of the Isle of Axholme* (1839). The existence of so many duck decoys in the fens and marshes of Lincolnshire in the 18th and early 19th centuries is further evidence of their wealth of wildfowl. Unfortunately very few of the records of these decoys have survived. Those which have, like the records of the Ashby decoy near Scunthorpe, show what valuable sources of information have been lost.

Interesting and valuable as these accounts and records are, they describe a bird fauna which largely disappeared with the complete reclamation of the remaining fens of Lincolnshire in the first decade or so of the 19th century. Unfortunately we have no similar accounts of the birds of the heathlands of the Wolds and the Lincoln Heath before they were finally enclosed and brought into cultivation early in the 19th century.

The second half of the 19th century brought increasing popular interest in natural history. Many local naturalists' societies were formed and devoted themselves largely to recording and compiling

lists of species for their own localities. In Lincolnshire such societies were established in the 1880's at Louth, Alford and Grimsby, and in 1893 the Lincolnshire Naturalists' Union came into being. Its *Transactions* were not published regularly until 1905, but many notes and records from Lincolnshire had appeared from the 1850's onwards in *The Naturalist*, a monthly journal covering the whole of the North of England. On the whole, birds received less systematic attention during this period than some classes of insects and certainly less than plants. There were in fact only two or three ornithologists of importance in Lincolnshire during the second half of the 19th century.

Outstanding among these was John Cordeaux. For about fifty years until his death in 1899 Cordeaux lived at Great Cotes near Grimsby, but his area of observation and recording covered the whole of the Humber district in Lincolnshire and Yorkshire. The first President of the Lincolnshire Naturalists' Union in 1893, he was also President of the Yorkshire Naturalists' Union in 1896. His *Birds of the Humber District* was published in 1872 and a further work, *A List of British Birds belonging to the Humber District*, appeared in 1899 shortly before his death. The later work, which is much more concise than the earlier, brings up to date all his information about the status and distribution of birds in the district. In Lincolnshire this district was said by Cordeaux to include the whole of Lindsey, but he does not appear to have had much detailed information about the distribution of birds in the southern half of Lindsey and he gives only occasional records for that area. His chief interest was in migration and for many years—from 1864 to 1899—he contributed lengthy reports on bird migration on the north-east Lincolnshire coast to *The Zoologist*. For nearly twenty years he was Secretary of the Bird Migration Committee of the British Association and was largely responsible for conducting that vast enquiry into bird migration on the coasts of Great Britain and Ireland undertaken by the Committee from 1880 to 1887. The value of his work in describing the status, distribution and migration of birds in north Lincolnshire during the second half of the 19th century will be readily appreciated. It must be said, however, that Cordeaux did not always appear to demand of himself or others the highest standards of care and accuracy in identification and recording. Some of his own sight records of rare species appear to have been made on quite inadequate evidence and he was too ready to accept similar records from others. Both the 1872 and the 1899 lists need to be

critically examined and used with discretion. These occasional imperfections, however, do not seriously detract from the outstanding contribution which Cordeaux made to Lincolnshire ornithology in the early stages of its modern development.

Already in Cordeaux's time it was the north of the county which received most attention from ornithologists, a state of affairs which continued until recent years. Four papers by Max Peacock on *The Birds of North-West Lindsey* appeared in *The Naturalist* for 1902, 1906 and 1908. These rather rambling notes give information about the distribution of common species in the district, and there are some valuable records of scarcer ones, but there are also records in them for which insufficient evidence is given and which cannot be accepted.

Miller and Skertchley's *The Fenland Past and Present* published in 1878 contains a list of the birds of the Fenland as a whole. In notes contributed by John Cordeaux there are several specific references to Lincolnshire. The only extensive series of records from south Lincolnshire during the late 19th century, however, were those of T. J. H. Brogden whose notes on *Birds of Spalding and the South Lincolnshire Fenland* between 1886 and 1896 were edited by John Cordeaux and appeared in *The Naturalist* for 1900. These notes contain some interesting records for the southern shore of the Wash and give information about the distribution of commoner birds in the Spalding district. Unfortunately the notes as published are often too brief to be of much value and adequate evidence of some records is lacking.

Migration on the north-east coast was intensively studied by another outstanding ornithologist, G. H. Caton Haigh of Grainsby. For nearly fifty years from about 1890 onwards Caton Haigh made regular observations of migration on the coast mainly between Tetney and Grainthorpe Havens. Although a most careful and accurate observer, Haigh made much use of the gun to confirm his identifications and to amass a collection of skins which is now in the British Museum. In this way he was able to add three new species to the British List and to record several others for the first time in Lincolnshire. His refusal to record a rarity when it was not obtained, however certain he felt about its identification, was in line with the policy of his time. It is strikingly illustrated by the record of the Red-flanked Bluetail which is included in the following List. But Haigh was no mere rarity hunter. Some of the most valuable information obtainable from his notes

concerns the relation between migration and weather conditions, the times of migration of the commoner species, the directions of flight, the behaviour of migrants and other related matters. Moreover, his records indicated that several species, such as the Barred and Yellow-browed Warblers and the Red-breasted Flycatcher, hitherto regarded as the rarest of vagrants on the east coast of England, were much more frequent in occurrence than had been supposed. Further observation and the trapping of migrants at bird observatories has confirmed that that is so. Haigh's presidential address to the Lincolnshire Naturalists' Union in 1913 on *The Migration of Birds as observed in Lincolnshire* summarised the progress of migration on the north-east coast throughout the year and gave much information about the other aspects of migration mentioned above. From 1900 to 1904 he contributed migration reports to *The Zoologist*, as Cordeaux had done for the previous thirty-five years. From 1911 until 1935 his records of the autumn migration were published annually in the *Transactions* of the Lincolnshire Naturalists' Union and his records of rarities appeared also in *British Birds*. A work entitled *Birds of a Lincolnshire Parish being a List of the Birds of North Cotes with Notes on the Autumn Migration* written shortly before his death in 1941 has not been published, but we have been fortunate enough to be able to read it and have found it of great value. In addition to all the information it contains about migration, there are interesting notes about the breeding species of the parish and its neighbourhood and about changes in their status during the writer's lifetime. The debt which we owe to Caton Haigh for our knowledge of birds on the north-east coast of Lincolnshire is abundantly evident from the following List.

Although in his presidential address of 1913 Haigh appealed for observation of migration to be made on the southern half of the Lincolnshire coast, he was himself a lone worker and confined himself very largely to his own small area. An ornithologist of a different kind was the Reverend F. L. Blathwayt who resided in the county from 1900 to 1916, first in Lincoln and then at Doddington nearby. From 1907 to 1919 he was Secretary of the Vertebrate Zoology Section of the Lincolnshire Naturalists' Union and in 1918 he was President of that body. One has only to read his contributions to the Union's *Transactions* and his presidential address to recognise a new attitude to the study of birds. Interested particularly in the numbers and distribution of birds and in the changes brought about by man's activities and by

natural causes, he not only made a tremendous contribution himself to our knowledge of Lincolnshire birds, but he constantly tried to encourage others to investigate some of the many problems of bird distribution in the county to which he frequently drew attention. He was the first to attempt a census of the Great Crested Grebe, Heron and Black-headed Gull populations of the county, and his accounts in his presidential address and in reports and papers in the above-mentioned *Transactions* of the birds of the Lincoln district and of Scotton Common in the days before its afforestation are valuable examples of local surveys of which there have been all too few in Lincolnshire. It was unfortunate that there were at that time so few to profit by his guidance and example. It is only in the last few years that some of the investigations which he suggested—the more intensive study of birds in the Wash area, for example—have been undertaken, and some of the problems of distribution which he described, such as the respective ranges of Marsh and Willow Tit, remain largely unsolved.

Blathwayt's major contribution to Lincolnshire ornithology was his List of the birds of the county published in the *Transactions* of the Union for 1914. In his sectional officer's report for 1913 he had referred to the lack of any complete published county bird List and it was no doubt with the aim of encouraging a more systematic study of Lincolnshire birds that he prepared such a List. Although he did not intend it to be a detailed survey, he was obviously handicapped by the scarcity of records from many parts of the county. We, too, have suffered from this nearly forty years later, but many more records from the Wash and the Fenland area have been available to us and, of course, all the information which ringing recoveries have since yielded was unknown to Blathwayt. Occasionally he makes a statement which seems too sweeping or is not adequately substantiated and he admits a few species to his List on evidence which does not seem convincing to us. But these are minor criticisms of a timely and invaluable work.

It is evidence of the lack of ornithologists in the county that no one was apparently forthcoming to take Blathwayt's place as Secretary of the Vertebrate Zoology Section of the Lincolnshire Naturalists' Union when he left the county for Melbury in Dorset in 1916. He was eventually succeeded in 1919 by W. S. Medlicott of Normanby near Scunthorpe whose own records in the *Transactions* for 1920 and 1921 from the extreme north-west of the county are most valuable and have provided us with much information. Unfortunately he too left the

county in 1922 and for nine years the Vertebrate Section of the Union was without a secretary. Lincolnshire ornithology had indeed fallen upon lean times. From 1922 to 1928 almost the only notes on birds in the *Transactions* were Caton Haigh's on migration on the north-east coast. During all these years he continued indefatigably to search the hedges and scan the shore at North Cotes during the autumn migration season, lamenting the while the increasing disturbance to birds caused by the establishment of the aerodrome and the increasing numbers of shore shooters who now came in their motor-cars from long distances. But it was only advancing age and infirmity that eventually compelled him about 1936 to give up his regular observations.

Some notes from the Skegness district appeared in the *Transactions* in 1923, 1924 and 1925 and again in 1932, but unfortunately these are of little value and some of the records should never have been published.

The *Transactions* for 1929 contained an excellent series of notes from the Grimsby district by S. A. Cox. In addition to his own records Cox included many made by R. May of Limber. In the same number there are notes by A. Roebuck on the autumn migration between Huttoft Bank and Anderby Creek, a stretch of coast-line on which no observations had previously been made. These encouraging developments marked the beginning of a new phase in Lincolnshire ornithology, one which received a fresh stimulus in 1932 when Cox was appointed Secretary of the Vertebrate Zoology Section of the Union.

The observations of Cox and May in the north-east of the county over a period of more than twenty-five years have made a most valuable contribution to our knowledge of Lincolnshire birds. Few areas in the county have been as well studied as the Brocklesby estate with its extensive woods, parkland and lakes. Cox's *Birds of the Brocklesby Lakes* published in the L.N.U. *Transactions* for 1938 is a valuable summary of the observations made in the area up to that time by May and himself. In addition both these ornithologists have frequently visited the heath country of the north-west and have helped to keep up to date our knowledge of the birds of that interesting district.

Another intensive survey of a much smaller area which must be mentioned here was Ralph Chislett's survey of the breeding birds of that part of Yorkshire which adjoins the southern half of the Isle of Axholme. This was the subject of his presidential address to the Yorkshire Naturalists' Union in 1939. Although his survey area

included only a small strip of Lincolnshire in the Isle of Axholme, some of the habitats are characteristic of a large part of the Isle and the survey is thus of greater interest to us than the area which it covered might suggest.

Caton Haigh's last notes appeared in the L.N.U. *Transactions* for 1935, but the long tradition of migration-watching on the north-east coast was worthily continued by B. A. Pye of Cleethorpes whose valuable records were published each year in the *Transactions* from 1933 until 1939. Since the war Pye has supplied many further records to the county bird reports in the *Transactions* and has given information in correspondence for the purposes of the present List.

During the 1930's and 1940's Dr. J. M. Harrison published in *British Birds* many records from the Lincolnshire coast, most of them from Tetney and North Cotes and a few from the Boston area. Harrison's critical examination of migrants which he obtained resulted in the identification of Icelandic and Continental races of several species.

Although there was thus much more ornithological activity in Lincolnshire in the 1930's than in the previous decade, it was still limited to a very few observers and almost entirely confined to northern—especially north-eastern—districts. There are very few published records from the whole of the southern half of the county between 1920 and 1940 and our knowledge of the distribution of several of the more localised species in that area remains scanty. In an attempt to discover more about the distribution of a number of such species in the county as a whole, S. A. Cox and A. E. Smith began an enquiry among members of the L.N.U. in 1939. Some valuable information was obtained but the war brought the investigation prematurely to an end.

There was one development in these inter-war years which demanded and encouraged a degree of co-operative work, and that was the making of censuses of certain species, a field of study in which Blathwayt had been a pioneer. The national census of heronries in 1928 was organised in Lincolnshire by Captain J. S. Reeve and several people took part in it and supplied information. A. Roebuck made a survey of Lincolnshire rookeries in 1929 and 1930 and repeated it in 1933. A further survey was made in 1944 and 1945 by F. T. Baker, J. H. White and others. A. Roebuck also made a survey of Rook and Starling roosts in the county in 1932. Lincolnshire observers supplied

information for the Great Crested Grebe census of 1931, the Barn Owl census of 1932 and the survey of Black-headed Gull colonies of 1938. A local census of the breeding pairs of the Sparrow Hawk and Kestrel in thirteen parishes in north Lincolnshire was made by S. A. Cox, R. May and J. H. Davey in 1932 and the results were published in the L.N.U. *Transactions* for that year. This type of census in a sample area has much to commend it and one wishes that more had been done in the county.

An important piece of research on bird behaviour carried out in Lincolnshire during the 1920's and 1930's was F. B. Kirkman's study of the Black-headed Gull, most of which was made at the then great gullery at Twigmoor.

For many ornithologists in Lincolnshire as elsewhere the war caused an interruption of observation and study, at least in their own localities. At the same time it brought others—some serving in the R.A.F., for example—into the county if only for short periods. When collecting material for this List some valuable notes were supplied to us by several war-time visitors. It was while stationed at North Cotes aerodrome in 1944 that P. E. Brown embarked on his well-known study of the breeding biology and behaviour of the Reed Warbler, most of which was made at North Cotes during the next four years. Since the war too several ornithologists in the R.A.F. have been stationed in Lincolnshire and have made valuable contributions to our knowledge of the distribution of birds in the county.

Since 1945 there have been several notable developments in Lincolnshire ornithology. The increasing interest in birds has been reflected in the much greater number of observers whose records have appeared in the annual bird reports in the L.N.U. *Transactions*. Some of these records have come from southern parts of the county, but compared with those from northern districts these have still been few in number. The Lincoln district and the south-east of Lindsey have received more attention, but perhaps the most interesting extension of observation has been along the coast of the Wash, an area to which both Haigh and Blathwayt more than thirty years before had urged that more attention should be given.

Reference has already been made in a previous chapter to the establishment by the Lincolnshire Naturalists' Trust in 1949 of a bird observatory in the Gibraltar Point nature reserve. Whilst the primary purpose of the Trust is nature conservation, it has also undertaken to

promote geographical and biological studies in any area which it may acquire or be asked to manage as a nature reserve. There is no need to dwell here on the value of the continuous observation of migration and the examination and ringing of migrants which are the principal functions of the Gibraltar Point bird observatory. Reference to its records and to its annual reports, of which we have made much use, will show that it has already in quite a short time made a great contribution to our knowledge of many aspects of bird migration in Lincolnshire. We believe that its inspirational value has also been important. Many ornithologists from many parts of the country have stayed there and contributed to what is essentially a co-operative undertaking. For many, new fields of study have been revealed and new techniques have been learned. Most important perhaps, new friendships have been made from which the study of birds in Lincolnshire and beyond has benefited.

Further south, observations by members of the Cambridge Bird Club have added tremendously to our knowledge of birds on the Wash coast and in the south Fenland of Lincolnshire, important areas long neglected. Visits to the Lincolnshire and Norfolk shores of the Wash chiefly in winter were made from Cambridge from 1942 onwards, but there was a considerable expansion of the Club's activities in 1950 and, whilst attention has still been concentrated on the Wash, observations have been made at various times of the year over a wider area of the Fenland. There have been regular wildfowl counts during the winter on the Welland Washes and on the Wash, mainly in the Holbeach Marsh and Witham mouth areas. A survey of gull roosts and feeding areas on the coast and in the Fens was made for a British Trust for Ornithology enquiry. The distribution of the Pink-footed Goose in the Fenland areas has received special attention and a study of the Brent Goose flocks on the Wash shore is also being made. Other work has included observations of wader movements in the southern part of the Wash and of the migration of many passerine species in that area. Spring and summer visits to the Wash and to the Welland Washes have yielded much information about breeding species. This systematic work by the Cambridge Bird Club in south Lincolnshire is a most welcome and valuable development and we hope it will long continue.

The monthly wildfowl counts organised by the Wildfowl Inquiry Committee have given other bird watchers in the county an opportunity to take part in a co-operative and valuable piece of work. Except in

the south Fenland area, these counts have been organised in Lincolnshire by the Lincolnshire Naturalists' Trust. The Trust also organised a census of Great Crested Grebes and Herons in the county in 1951 and several members of the Trust assisted in these.

These are some of the post-war developments in Lincolnshire ornithology. Already as a result of them some of the gaps and obscure places in our knowledge of the status and distribution of birds in the county have been filled in and clarified and we may look forward to an increasing volume of information. More systematic attempts to elucidate some of the problems of distribution which remain might be profitable, and more detailed survey-work in small sample areas would carry us still further. More observation is needed generally in the south-west, in central districts and in the north Fenland. Whilst migration has long been observed and recorded on the north-east coast and more recently at Gibraltar Point and along the southern shore of the Wash, little is known about it on other parts of the coast, on the Humber, in the Trent and other river valleys and elsewhere inland. The numbers, distribution and movements of wildfowl and waders in the Wash and Humber and on other parts of the coast need more attention, as does the occurrence of various sea birds in coastal waters. These and many other fields of investigation offer interesting opportunities to the increasing number of those who study birds in this county.

The time could not be more opportune, we believe, for a new List of Lincolnshire birds. A new basis for investigation is needed and we hope that the List which follows will provide it. That has certainly been our main purpose in compiling it.

A LIST OF THE BIRDS OF LINCOLNSHIRE

The following List is not intended to be a detailed history of the birds of this county. Whilst all the species recorded in the county are included, our primary purpose is to give an account of the present status and distribution of birds in Lincolnshire and of the main changes which have taken place during the present century, especially since the compilation of Blathwayt's List in 1914*. Reference to this, the only previous List of Lincolnshire birds, has already been made. Whilst we have thus made little search for unpublished records prior to 1914, we have examined all Blathwayt's main published sources of information as given in the introduction to his List, in particular Cordeaux's *Birds of the Humber District* of 1872 and the revision of that work of 1899. We have used the latter as well as Blathwayt's List to assess some of the changes which have taken place during the last fifty or sixty years.

Unless they have occurred since 1914, we have omitted entirely those species mentioned by Blathwayt but not accepted by him as authentically recorded. On examination of the available evidence we have felt unable to admit to our List ten species included in Blathwayt's, but in order to avoid confusion we have mentioned these species in the customary square brackets. Blathwayt included five of these on the authority of Cordeaux, though he admitted that some of Cordeaux's records appeared to rest on somewhat slender evidence. Blathwayt gives sub-species separately, but we have adopted the practice of mentioning these under the appropriate species. Records of two new species—Red-flanked Bluetail and Rose-coloured Starling—made before 1914 have been published since then. We have also discovered several additional pre-1914 records of other rare species, of which Blathwayt was evidently unaware.

Records published in the annual *Transactions* of the Lincolnshire Naturalists' Union are the main source of information about the county's birds since 1914. Unfortunately, for most of the time until 1947 these were published in diary form, there being sometimes two or three separate diaries compiled by different observers. This has made

* This List appeared in the Lincolnshire Naturalists' Union *Transactions* for 1914 which were published in 1915. Apart from one record for February, 1915, the List was evidently completed to the end of 1914 and we refer to it, therefore, as the 1914 List.

the work of reference extremely laborious and it is difficult to be certain that no important records have been omitted from our List. As already explained, most of these records are from northern parts of the county, the southern half having been much neglected. In the last few years, however, the annual reports of the Gibraltar Point Bird Observatory and records published in the annual reports of the Cambridge Bird Club have given us valuable information for the Wash and the Fenland areas of Lincolnshire. In addition to these and other sources, a good many Lincolnshire records have appeared from time to time in *British Birds*.

We have mentioned recoveries of ringed birds relating to Lincolnshire where these seem to give significant information about such problems as the status of breeding species and the origin and migratory routes of winter visitors and passage migrants. Most of these recovery records have been found in the lists published from time to time in *British Birds*.

Many ornithologists have supplied us with information in correspondence. They are too many to mention individually, but we hope that they will accept our thanks collectively for their assistance.

Among our unpublished sources of information special mention must be made, however, of G. H. Caton Haigh's *Birds of a Lincolnshire Parish being a List of the Birds of North Cotes with Notes on the Autumn Migration*, a work to which we have already referred in our chapter on Lincolnshire Ornithology. The MS. is at present in the care of the Bird Room at the British Museum (Natural History), but we have been given access to it through the kindness of Mr. C. L. E. Haigh of Grainsby to whom we are deeply indebted. We are grateful also to Mr. J. D. Macdonald, Principal Scientific Officer, British Museum (Natural History), for his assistance in this matter. Many of Caton Haigh's records were published annually in the *Transactions* of the Lincolnshire Naturalists' Union from 1911 to 1935 and records of most of the rarities which he obtained also appeared in *British Birds*. Nevertheless, the additional records and information concerning various aspects of migration in the above-mentioned work have been of the greatest value to us in compiling our List.

In the work of compilation we have received much assistance. Mr. Baker in his preface has already described this and we wish only to add our own acknowledgment of the invaluable contribution which those whom he mentions and others have made to the preparation of

this List. In particular we wish to thank Mr. A. E. Vine for many valuable suggestions and criticisms. Mr. Baker himself as General Editor of this series has given us constant encouragement and assistance.

We have not considered it necessary or desirable to encumber the text with a multitude of references. As already stated, most of our information, including almost all records of rare species, has been collected from published sources of which the most important have been mentioned in this Introduction. These and others are listed in the bibliography at the end. Unpublished information supplied to us in correspondence has been carefully checked and has been preserved for reference at the City and County Museum, Lincoln. We have frequently referred in the List to the important works of Cordeaux and Blathwayt since we have used these for comparative purposes. Most of Caton Haigh's records which we mention have been published, but we have occasionally referred to statements or records in the unpublished work already described.

It has not been possible to show on our general map all the places referred to in the List, but after most of those which are not shown there we have given the locality or the nearest place which is shown.

We have adopted the order of the *Check-List of the Birds of Great Britain and Ireland* published in December, 1952, by the British Ornithologists' Union. This is based on the Wetmore classification and is now generally accepted in this country. For English names we have in the main followed *The Handbook of British Birds*, but we have adopted most of the changes and simplifications introduced in *British Birds* in January, 1953, and described at the beginning of volume xlvii of that magazine. Where the name of a species has been completely changed we have inserted in brackets the former name as used in *The Handbook*.

Our List contains a total of 275 species. In addition, 28 recognised races have been identified. Species which we consider should be mentioned, but the records of which are not, in our opinion, fully authentic, are placed in square brackets to indicate that we do not admit them to the List. Of the 275 species in the List, 101 are regular breeding birds in the county and another three are probably regular.

We have included in the List records made up to December 31st, 1953, but none thereafter with the exception of the 1954 heronry figures.

Order COLYMBIFORMES

Family COLYMBIDAE

Black-throated Diver. *Colymbus arcticus*.

A very scarce winter visitor to coastal waters. It has occurred very rarely on inland lakes and ponds.

Great Northern Diver. *Colymbus immer*.

A winter visitor to coastal waters in very small numbers. It has been rarely recorded inland.

Red-throated Diver. *Colymbus stellatus*.

A fairly numerous winter visitor to coastal waters. It is by far the commonest of the three divers. Single birds occur occasionally on inland waters.

Order PODICIPIDIFORMES

Family PODICIPIDAE

Great Crested Grebe. *Podiceps cristatus*.

A summer resident and winter visitor. It was a common bird of the undrained Fenland lagoons, but it appears to have become extinct as a breeding species in the county after the final reclamations of the early 19th century. According to Cordeaux in 1872 it did not breed in north Lincolnshire, but by 1914 Blathwayt knew of eight occupied waters in the county, and a census in 1931 revealed 27 nesting pairs on thirteen waters. No complete census has been made since that time and, although most occupied waters were counted in 1951 and/or 1952, it is not possible to make an accurate comparison between the present position and that of 1931. It seems probable, however, that there has been a slight decrease in the number of breeding pairs since that time. Waters known to have been occupied in 1952 were as follows: Burton Gravel Pit (two pairs), Culverthorpe Lake (one pair), Deeping St. James Ballast Pit (three pairs), Fillingham Lake (two pairs), Lincoln L.M.S. Pit (one pair), Lincoln L.N.E.R. Pit (three pairs). In 1951 the following additional waters were visited: Denton Reservoir (one pair), Harlaxton Lake (one pair), Syston Lake (two pairs). Of the above, Burton Gravel Pit had been occupied since 1931, but Sleaford Ballast Pit, which had one pair in 1931, had none in 1951. Other waters occupied in 1931 from which there have been no reports in recent years

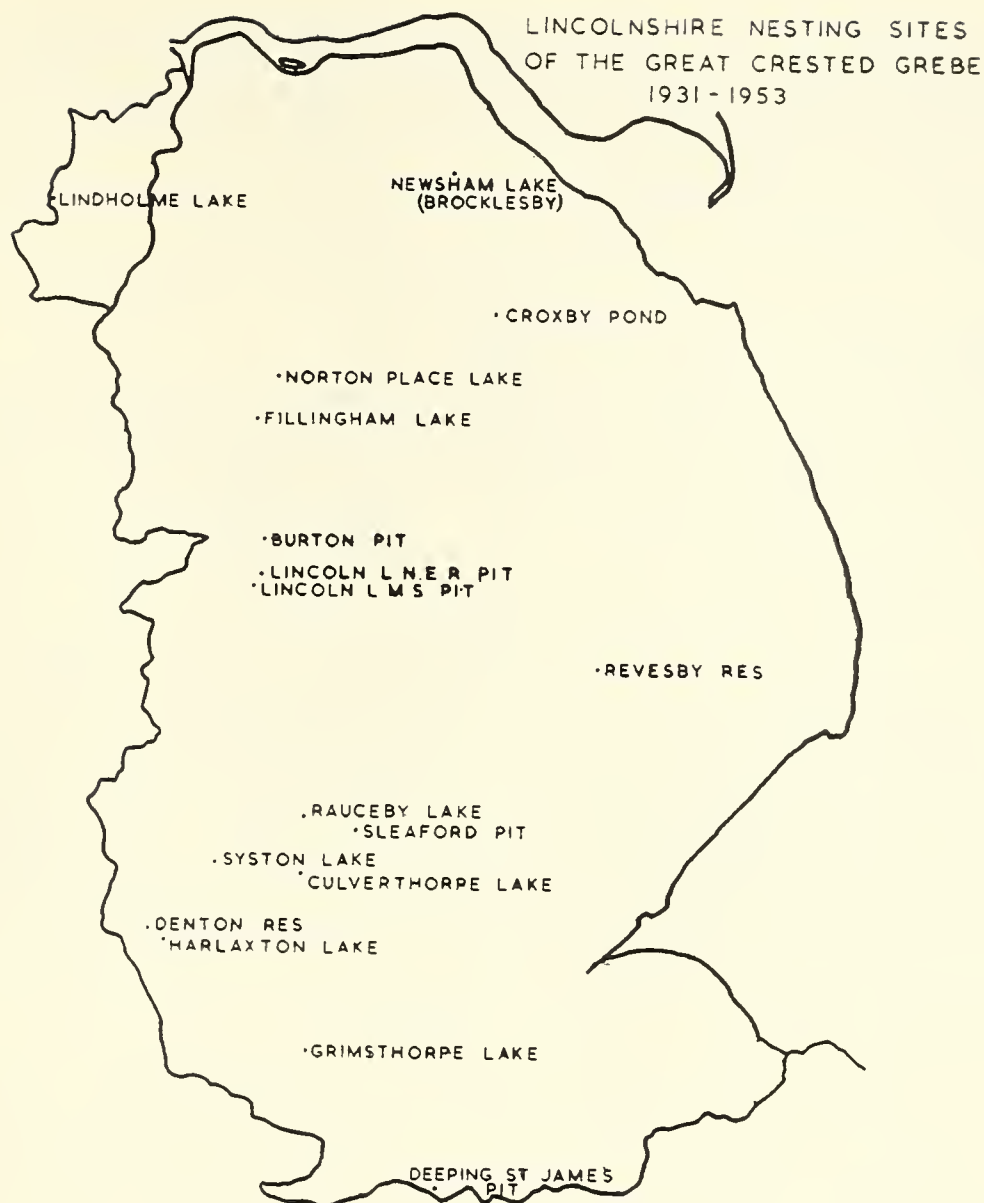


FIG. 6

were: Grimsthorpe Lake (two pairs), Lindholme Lake (one pair), Norton Place Lake (one pair), Revesby Reservoir (ten pairs). There was also a pair at Rauceby Lake in 1935 but there has been no report from there since then. In addition, a pair nested at Newsham Lake, Brocklesby, in 1948, and one at Croxby Pond for several years from 1942 but this water was deserted in 1951. Breeding waters are largely deserted in late summer and early autumn and birds are numerous from mid-August onwards on tidal estuaries and on the sea off the coast, but occur only occasionally in very small numbers on inland waters in winter. One was seen on the Welland estuary in early June, 1952.

Red-necked Grebe. *Podiceps griseigena*.

A winter visitor chiefly to coastal waters. According to Cordeaux in 1899 it was the commonest grebe on the coast and, although Caton Haigh considered it less numerous than the Great Crested, he described it as a regular visitor. In the winter of 1936-37 considerable numbers

occurred during severe weather on inland as well as coastal waters. Since then it has been rarely recorded, although this may be due to lack of observation rather than to a decrease in numbers. It is said to be quite frequent on the Norfolk side of the Wash. It has occurred from late August onwards, but most frequently in January and February.

Slavonian Grebe. *Podiceps auritus.*

A scarce winter visitor to coastal waters. It has occurred most frequently in January and February. Caton Haigh described it as by no means common on the north-east coast, but did not say whether it occurred regularly. He recorded that several were shot there in February, 1932, and, as with the previous species, there was an influx of exhausted birds during the winter of 1936-37 when several appeared inland as well as on the coast in north Lincolnshire. One was seen at Newsham Lake, Brocklesby, on February 4th, 1940, and another was found nearby on the same day. On March 5th, 1950, two grebes probably of this species were seen in the Nene Channel. The scarcity of recent records may be due only to lack of observation.

Black-necked Grebe. *Podiceps caspicus.*

One is said to have been found at Thoresway near Caistor in January, 1851, and three to have been taken near Lincoln in autumn, 1882. No details of the latter specimens are available. The scarcity of Lincolnshire records may be due to lack of observation since the species is seen quite frequently on the Norfolk side of the Wash.

Little Grebe. *Podiceps ruficollis.*

A fairly common resident on many suitable ponds, lakes and rivers. Outside the breeding season it often occurs in small parties on the larger inland waters and is occasionally seen in tidal estuaries also. A considerable number arrive in the Marsh district in October and November.

Order PROCELLARIIFORMES

Family PROCELLARIIDAE

Leach's Petrel. *Oceanodroma leucorhoa.*

A rare vagrant, being occasionally found, like the Storm Petrel, after strong gales. Several were reported in Lincolnshire after the great 'wreck' of this species which occurred off the west coast of Britain in the autumn of 1952.

Storm Petrel. *Hydrobates pelagicus*.

A rare vagrant, usually after severe gales which sometimes drive birds inland.

Manx Shearwater. *Procellaria puffinus*.

A visitor to coastal waters, chiefly from August to October. It is said to be well-known to local fishermen and may be fairly numerous out to sea. Near the coast, however, it is only rarely seen, usually during periods of heavy gales.

Great Shearwater. *Procellaria gravis*.

A very rare vagrant in coastal waters. One was shot on Holbeach Outmarsh in December, 1893, and another in the Welland estuary in November, 1902. Caton Haigh recorded finding one dead on the shore at North Cotes with a fish-hook stuck in its throat, but gave no date. He also recorded that on October 2nd, 1908, he saw a number of light-coloured shearwaters off the mouth of Grainthorpe Haven which he had no doubt were of this species.

Sooty Shearwater. *Procellaria grisea*.

A rare visitor to the coast, chiefly in autumn, but exceptionally in winter during severe weather. According to Caton Haigh the species was not infrequently seen at sea on the north-east coast in September and was particularly numerous in 1908. There have been very few records during the last twenty years, however, the last being an exhausted bird picked up at North Cotes after heavy gales in January, 1941.

Fulmar. *Fulmarus glacialis*.

A visitor to coastal waters, chiefly in autumn, but also occasionally in winter and in the summer months from May to August. It is said by fishermen to be plentiful at sea off the coast during autumn. It is much more rarely seen over the shore, but apparently more frequently than in former years, especially in summer when there are several pairs breeding on the cliffs at Weybourne in north Norfolk. One ringed as a nestling on the Isle of Man in August, 1946, was recovered at Saxilby near Lincoln twenty days later.

Order PELECANIFORMES

Family SULIDAE

Gannet. *Sula bassana*

An autumn and winter visitor to coastal waters, most numerous from late July to early November. The majority are immature birds. Exhausted birds are occasionally picked up inland after gales.

Family PHALACROCORACIDAE

Cormorant. *Phalacrocorax carbo*.

Fairly numerous on the coast from autumn to spring, chiefly between mid-August and the end of October, and in smaller numbers throughout the summer. It is occasionally seen inland.

Shag. *Phalacrocorax aristotelis*.

An autumn and winter visitor to the coast. It has been seldom recorded, but this may be due in part to the difficulty of distinguishing it from the Cormorant. It is certainly rarer than that species.

Order ARDEIFORMES

Family ARDEIDAE

Heron. *Ardea cinerea*.

A resident and winter visitor. The census of 1954 showed that there were 315 pairs breeding in the county. The 1928 census gave 150 pairs. The following table gives the number of occupied nests in each heronry in 1928 and 1954.

<i>Heronry</i> (north to south order)	<i>Occupied Nests</i>	
	1928	1954
Appleby	13	deserted c. 1935
Skidbrooke Churchyard	—	3
Wharton Wood, Corringham	20	61
Grange Wood, Kingerby	2	deserted c. 1943
Legbourne Wood	—	12
Muckton Wood	34	34
Willoughby Wood	42	16
Long Wood, Fiskerton	—	9
Old Hag Wood, Doddington	18	10
The Jungle, Eagle Moor	—	1
Troy Wood, Tumby	—	55
Aswarby Park, Nr. Sleaford	1	deserted
Evedon Wood	20	23
Grimsthorpe Park	—	2
The Mere, Deeping St. James	—	89

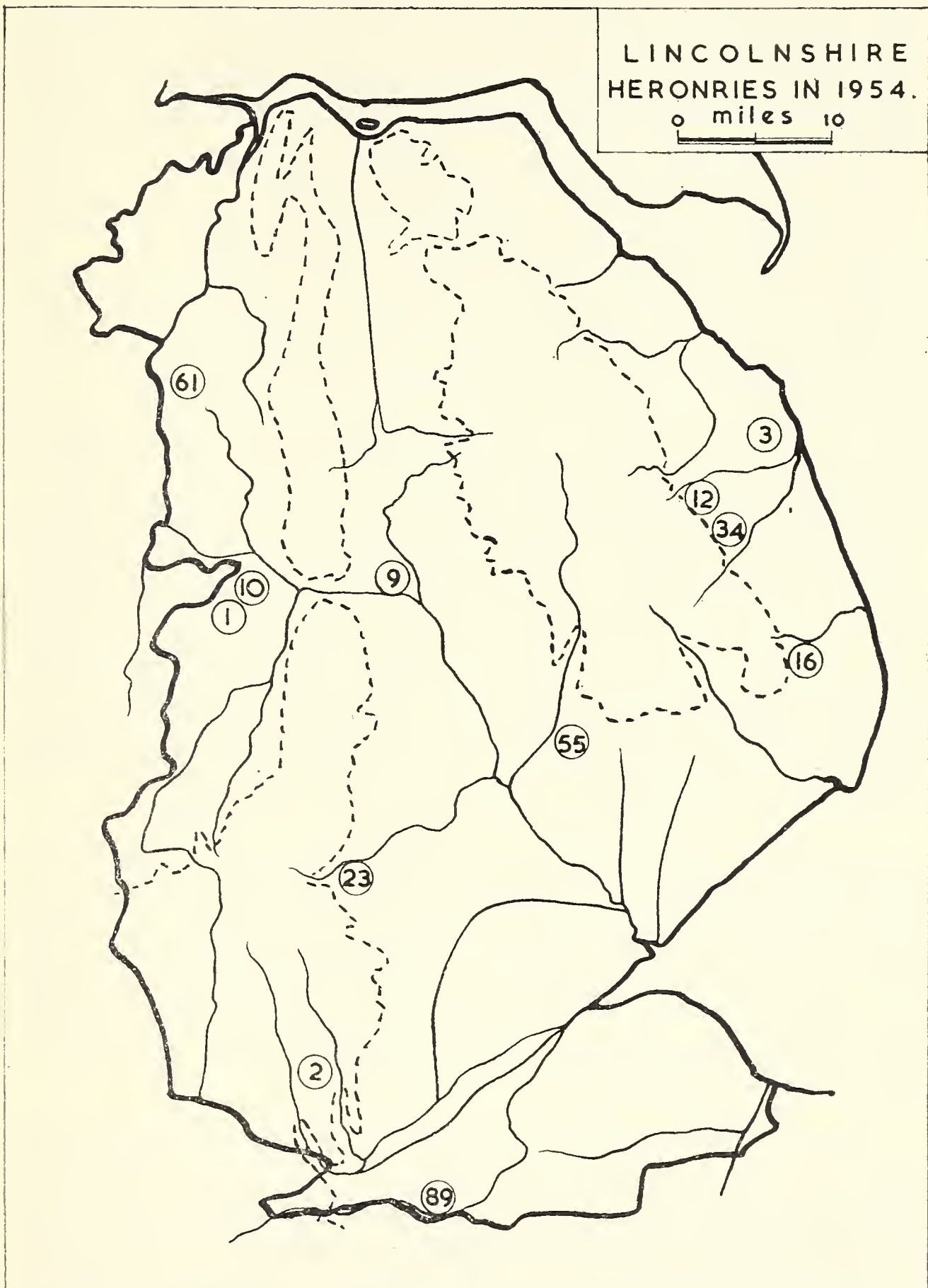


FIG. 7 Map showing the distribution and size of Heronries in Lincolnshire in 1954. Numbers in circles represent occupied nests. Broken line is 100ft. contour.

Only one heronry of any size, that at Appleby, had been deserted since 1928, but the largest heronry in that year, that at Willoughby Wood, had been much reduced in size. This was due to tree-felling at a time when the colony was already much diminished as a result of the severe winter of 1946-47 which caused heavy mortality among Herons. The small colony in Grimsthorpe Park, which did not exist or was not recorded in 1928, is said to have contained up to twelve nests at one period in the 1940's, but by 1951 there were only four and the decrease has continued. The Wharton Wood colony had increased threefold between 1928 and 1954, but those at Muckton and Evedon Woods remained almost the same size. Two large heronries had been established since 1928, one at Troy Wood, Tumby, the other at The Mere, Deeping St. James. The latter seems to have been formed by birds moving from Milton Park in Northamptonshire. The heronry at Legbourne Wood is probably an offshoot of that at Muckton which is only about a mile away. The heronry at Long Wood, Fiskerton, was established only in 1952. In the previous year there was a colony of about twenty-five pairs at Holme Wood, Stainfield, about two miles away, but this wood was felled later in 1951 and some—but evidently not all—of the birds from this colony seem to have moved to Fiskerton. Between 1928 and 1954 single nests of Herons have been reported from time to time in several places in the north of the county and in 1952 there were two nests at Saxby All Saints north of Brigg.

Even after taking into account periodic fluctuations and the possibility that one or more colonies were missed in 1928, it is evident that since that time there has been a considerable general increase in the Heron population of Lincolnshire. It is interesting to note that twenty years before that, in 1908, Blathwayt knew of only five heronries in the county containing only about 66 pairs, although it is probable that at least one other colony existed at that time.

Whilst the Fens and the Marshland offer excellent feeding grounds, there are few suitable woods for nesting purposes there. As a result, heronries are distributed around the edge of these lowland areas, often in close proximity to a river. Legbourne, Muckton and Willoughby are on the edge of the Marshland; Troy, Fiskerton, Evedon and Deeping on the edge of the Fens near the Witham, the Slea and the Welland; Wharton and Doddington are in the Trent Valley.

Heronry are more widespread outside the breeding season, being particularly numerous on the coast in late July, August and September

when flocks of up to 30 have been seen there, many of the birds being immatures. There is evidently considerable movement among some British-bred Herons. Seven ringed as nestlings at the Deeping heronry in May, 1952, were recovered between December and February of the following winter: two in Nottinghamshire, one in Leicestershire, one in Northamptonshire, one in Norfolk, two in Cambridgeshire. Three ringed in Bedfordshire as nestlings have been recovered in Lincolnshire: one less than three months after ringing, another in its first winter and the third in its second winter. Another, ringed in Oxfordshire, was recovered here five years later, in April. There is also immigration from the Continent: one ringed in southern Sweden as a nestling in 1934 was recovered in Lincolnshire in January, 1936.

Purple Heron. *Ardea purpurea*.

Cordeaux recorded that one was shot at Hykeham near Lincoln in the second half of the 19th century. Two were seen on July 31st, 1952, at a lake on the Brocklesby estate and at least one of them was still there on September 1st.

Squacco Heron. *Ardeola ralloides*.

Only two records: one shot at Fillingham Lake north of Lincoln in June, 1861; another at Great Cotes near Grimsby on September 29th, 1910.

[Cattle Egret (Buff-backed Heron).] *Ardeola ibis*.

One was at North Killingholme on the Humber for several weeks in the autumn of 1936 and there was another at Grainthorpe about 1935. Both of these were almost certainly escapes.]

Night Heron. *Nycticorax nycticorax*.

One, an immature bird, was shot at Tetney on November 26th, 1888.

Little Bittern. *Ixobrychus minutus*.

An adult male was shot near Gainsborough on May 20th, 1870. Cordeaux cited another Lincolnshire record some years before 1872 but gave no details. An immature bird was caught and released at Goxhill where it stayed from August 12th to 16th, 1953.

Bittern. *Botaurus stellaris*.

Up to four pairs breed annually in one locality near the Humber shore. Breeding was first proved there in 1949, but birds had been

present and breeding had probably occurred since 1942 and perhaps earlier. Otherwise, the Bittern is now a not infrequent winter visitor to the county, and has been recorded in the last twenty years in almost every month from September to April. Formerly it was a common resident in the fens of the south of the county, in the Isle of Axholme, in the marshes of the heath country around Manton and Twigmoor, in parts of the eastern Marshland and perhaps elsewhere. In the Marsh near Alford there is a hamlet named Butterbump, an old local name for the Bittern. From most of these areas it seems finally to have disappeared during the first thirty years of the 19th century, as drainage and cultivation destroyed its habitats. In the Isle of Axholme, however, it was said to be still common about 1835. By the 1860's it was only a rare winter visitor to the county and apparently remained so until about 1930, after which it was more frequently recorded.

Family CICONIIDAE.

White Stork. *Ciconia ciconia*.

One was shot in June, 1832, at Marshchapel on the north-east coast. In the *Notitiae Ludae* of 1834, three are said to have occurred near Louth in the previous ten years. It is also mentioned by Stonehouse in 1839 as having occurred in the Isle of Axholme. Both this and the Louth records must be considered doubtful.

Family PLATALEIDAE.

Spoonbill. *Platalea leucorodia*.

A rare visitor in coastal areas, but apparently more frequent in recent years. Blathwayt gave only two definite 19th century records, both about 1860. Two were seen at Tetney Haven in early November, 1911, and one was shot in the Welland estuary a few days later. There appear to have been no other records until 1945. Since then, nine have been recorded: five in a flock in January at North Cotes, the others singly on the Wash coast at Gibraltar Point and in the Welland Estuary in April, June (2) and November.

Glossy Ibis. *Plegadis falcinellus*.

One was shot on Read's Island in autumn, 1869, one at Skegness on September 9th and another there on October 27th, 1881. Caton Haigh recorded that one was seen at Tetney and North Cotes in the latter part of September, 1923. Apparently he did not see it himself but was satisfied with the description given to him by others.

Order PHOENICOPTERIFORMES

Family PHOENICOPTERIDAE

[Flamingo. *Phoenicopterus ruber*.

There are several records of the species on the coast, all since 1910. One shot at North Cotes on November 8th, 1910, had almost certainly escaped from captivity since the secondary quills of one wing had been cut. There were two at North Cotes on October 27th, 1916, and another on December 6th in the same year. One was shot at Grainthorpe Haven on February 2nd, 1917. Caton Haigh described these four birds as "excessively wild". More recently, one was seen on the Wash shore between Boston and Wainfleet on August 16th, 1939. All these are open to suspicion of having escaped from captivity.]

Order ANSERIFORMES

Family ANATIDAE

Mallard. *Anas platyrhynchos*.

A well-distributed and fairly numerous resident, though it seems to have decreased in many areas during the last thirty or forty years. It is also a winter visitor in large numbers to the coast and to estuaries and inland waters. It is especially numerous on the coast during periods of severe frost. Those which spend the day on coastal waters and estuaries usually flight inland to feed at dusk. Caton Haigh mentioned occasional large-scale movements of Mallard and Wigeon along the north-east coast into the Humber in October, November and December.

Teal. *Anas crecca*.

A resident, breeding in small numbers in several suitable localities. It is probably most numerous in the heath districts of the north-west. In the Fens it is a rare breeder. It is also a winter visitor in large numbers on many inland waters and on coastal estuaries and mud flats. There is much passage movement, especially in coastal districts, between mid-July and October and, again, on a smaller scale, from February to April. Five birds ringed at Orierton, Pembrokeshire, and Abbotsbury, Dorset, in October, November and December have been recovered in Lincolnshire in the following January and February, possibly on return migration to the Continent after wintering in the West of England. In the Humber and in the Wash, Teal are most numerous at the time of autumn migration. The largest numbers on tidal

waters during the winter are probably to be found on the upper waters of the Humber from Read's Island to the junction of the Trent and the Ouse. These birds flight inland to feed at dusk. In the Wash in winter it is usually a good deal scarcer than in the Humber and at times is almost entirely absent there. Caton Haigh recorded a serious decrease in numbers on the north-east coast in the 1920's and early 1930's. He also observed that it resorted to the coast in winter much more frequently than formerly.

Garganey. *Anas querquedula.*

A passage migrant and summer visitor. On migration it occurs in small numbers on inland waters and on coastal creeks and estuaries, mainly during late March and April and between late July and mid-September. One ringed near Bruges in Belgium in August, 1951, was recovered in Lincolnshire thirteen days later. During the last fifteen years or so it seems to have been much more numerous on passage than formerly. Twenty-nine were taken at the Ashby Decoy near Scunthorpe between 1834 and 1868. Cordeaux in 1899 described it as an occasional visitor in the Humber district; Blathwayt in 1914 described it as a rare migrant to the county. Caton Haigh met it only three times at North Cotes between the 1880's and the 1930's. It has been much more frequently recorded inland and on the north-east coast since then, but it is still rare in the Wash. Prior to 1914 a few pairs bred, perhaps regularly, in the north-west, but breeding does not seem to have been recorded from that time until 1940 when two pairs were reported in the Fenland in the extreme south of the county. Since 1949 up to five pairs have been seen during each breeding season on the Welland Washes. In May, 1953, two broods were seen there and breeding has undoubtedly taken place annually since 1949 there and perhaps elsewhere in the Fens. In the Humber marshes at Goxhill nests were found in 1948 and 1949 and a pair may have bred there again in 1952.

[Blue-winged Teal. *Anas discors.*

There are two recent records of this American species. One occurred on a pond at Sudbrook near Grantham on September 10th, 1941, and subsequently stayed with tame wildfowl; the other was seen near Lincoln in a party of swans, ducks and waders on April 22nd, 1947. It seems likely that both were escapes.]

Gadwall. *Anas strepera.*

A rather scarce winter visitor to inland waters, but it seems to have become more regular and more numerous in recent years. It is rarely seen on the sea. Blathwayt described it as "a very rare winter visitor" for which, in 1914, there were no recent records.

Wigeon. *Anas penelope.*

A winter visitor in very large numbers, mainly to the estuaries of the Wash and to the Humber. First arrivals are in early September, occasionally in late August; the majority leave in March, but a few remain during April and occasionally into May. Maximum numbers of several thousands in both the Wash and the Humber are usually present from November to February. In the southern part of the Wash numbers are closely related to the presence or absence of floods on the Fenland Washes which attract thousands when in flood. On the north-east coast Caton Haigh found that numbers of Wigeon varied considerably according to the severity of the weather. In a mild season only 200 or 300 birds were present, but in severe weather 2,000 to 3,000 often occurred. Fluctuations on this scale have not been noted elsewhere.

Wigeon feed on mud flats and salt-marshes and on grasslands near the coast. In some areas where they are little disturbed, particularly in parts of the Wash, their main feeding movements are related to the tide. Elsewhere they usually rest far out on the flats or offshore during the day if the sea is calm, and flight in at dusk or after dark to their feeding grounds. Apart from the Welland Washes when flooded, only small numbers of Wigeon occur on other inland waters.

A Wigeon shot in Wainfleet Haven in January, 1950, had been ringed in the Astrakhan Reserve at the mouth of the River Volga in August, 1948. Another ringed at Gibraltar Point in January, 1950, was shot in eastern Denmark in November, 1951. One ringed at Orierton, Pembrokeshire, in January, 1939, was shot in the following November at Holbeach, and another ringed in Suffolk in January, 1938, was shot in the following December at the mouth of the Welland.

Breeding was recorded in north-west Lincolnshire in 1898, 1926 and 1927, but this may have been the result of introduction in each case. A few often stay the summer in the south of the Wash.

Pintail. *Anas acuta.*

A winter visitor in small numbers, mainly to coastal waters, but quite large numbers are sometimes seen on the Welland Washes when these are flooded. In February and early March, 1952, up to 350 were seen there, an exceptionally large number. On the Lincolnshire side of the Wash, in the Welland and Witham estuaries, it is rather scarce, occurring in flocks usually of under 20. In the Humber district, Cordeaux in 1899 described it as not uncommon although irregular in appearance, but Caton Haigh encountered it in only very small numbers on the north-east coast, the largest flock he ever recorded consisting of only 15 or 16 birds. In 1948 it was described by Pye as decidedly uncommon in the north-east of the Marsh district, but it appears to have been seen rather more frequently there since that time, especially on passage in late September and early October. Caton Haigh also noted northward passage in March when the birds were almost always in pairs. In the Humber likewise it occurs in only very small numbers, mainly in September. On inland waters in the north, notably on the Brocklesby lakes, it has occurred more frequently though still in small numbers in recent years. A pair bred in the Fenland area in 1940 and in 1952, and possibly also in 1951.

Shoveler. *Spatula clypeata.*

A resident, breeding regularly in the Fenland where it is not uncommon, and in smaller numbers in the heath district of the north-west and in one or two other localities. It is also a winter visitor in small numbers to inland and, less frequently, to coastal waters. It is more numerous on migration, especially in the Humber and in the Marsh and Fen districts, from August to early November and again, but much less commonly, in March and April.

Red-crested Pochard. *Netta rufina.*

There are two 19th century records of birds shot near Boston in 1826 and 1854. Five were seen on the north-east coast in April, 1937, and one pair remained to breed. It was considered likely that these had been released from captivity.

Scaup. *Aythya marila.*

A winter visitor to coastal waters, especially to the Wash estuaries and the mouth of the Humber. Numbers appear to vary considerably and are usually, though not invariably, larger in severe weather. When numbers are largest, flocks of several hundreds are often seen. Scaup

arrive in October and November and leave during March. It is only occasionally seen inland. A pair with ducklings still unable to fly were seen in Tetney Haven on August 7th, 1944, and on subsequent occasions during that month. Cordeaux recorded that in 1867 a pair frequented the mouth of one of the creeks in the parish of Great Cotes throughout the summer.

Tufted Duck. *Aythya fuligula.*

A winter visitor in small numbers chiefly to inland waters. It occurs occasionally on coastal creeks and estuaries, but very rarely on the open sea. There is some evidence of passage migration, especially in the spring. Blathwayt in 1914 stated that a few pairs probably bred in the county but that there was no certain proof. Breeding was recorded in the north-west in 1920 and in many later years. It seems probable that a few pairs have bred regularly in that area since that time.

Pochard. *Aythya ferina.*

A winter visitor mainly to inland waters in varying but seldom large numbers. On the north-east coast small parties are occasionally seen on creeks and estuaries, but there are no records of its occurrence on the Wash coast. A few pairs breed regularly in the north-west and breeding was recorded in the Lincoln area in 1952 and 1953.

Goldeneye. *Bucephala clangula.*

A winter visitor in small numbers to coastal and inland waters from October to April. It is usually more plentiful on the coast in severe weather. It seems to have occurred more frequently inland during recent years.

Long-tailed Duck. *Clangula hyemalis.*

A scarce and apparently irregular winter visitor to the coast. It has occurred most frequently in October, more rarely in November and later in the winter. Almost all the autumn birds recorded have been immature, adult birds occurring more rarely and usually later in winter.

Velvet Scoter. *Melanitta fusca.*

An autumn and winter visitor to coastal waters in smaller numbers than the Common Scoter, although it is probably often not distinguished from that species when far out to sea.

Common Scoter. *Melanitta nigra.*

A common autumn and winter visitor to coastal waters where non-breeding birds are present throughout the summer. The main autumn immigration takes place in August and September. It is evident from the records of Cordeaux, Caton Haigh and others that there has been a very considerable decrease in the numbers of this species since the early years of the present century. Writing about 1938, Caton Haigh said: "Immense flocks numbering thousands, which were formerly a feature of this coast, are now a thing of the past."

Eider. *Somateria mollissima.*

A very scarce and irregular winter visitor to the coast, occurring most frequently between November and January. Blathwayt stated that it occurred in small numbers but usually kept well out to sea. Caton Haigh, however, described it as an extremely rare straggler to the Lincolnshire coast in mid-winter. Birds which he encountered were always immature. In 1952 and 1953 it seems to have been more numerous than usual. In the winter of 1952-53 at least five were seen and between September and December, 1953, at least four were seen in the Wash and at the Humber mouth.

Red-breasted Merganser. *Mergus serrator.*

A winter visitor to coastal waters from September to March. It is usually in small numbers, but is often more plentiful in severe weather. It is rarely seen inland.

Goosander. *Mergus merganser.*

A winter visitor from September to March, occurring regularly in small numbers on coastal estuaries and on inland waters. It is usually more numerous during severe weather.

Smew. *Mergus albellus.*

A rather scarce winter visitor to coastal and inland waters. It occurs from November to March, but most frequently in January and February. Like the two preceding species, it is more numerous in severe winters.

Sheld Duck. *Tadorna tadorna.*

A resident, breeding in considerable numbers on coastal sand-dunes, sea and river banks, and, in the north-west, on inland warrens, such as Twigmoor, several miles from the Trent and the Humber. It

seems to have increased during the present century. Most adults, which include many non-breeding birds, leave the Lincolnshire coast between mid-June and mid-July, presumably for moult-migration. They begin to return in late August and early September, numbers increasing to a peak usually about January. The Humber and the Wash are favourite resorts of large flocks during these winter months.

Ruddy Sheld Duck. *Casarca ferruginea*.

A rare vagrant. One was shot at Humberston on September 1st, 1892, an autumn in which considerable numbers occurred in Britain. Three were seen on the Trent on October 20th, 1898, one being shot. Another was shot at North Cotes on August 30th, 1919.

Grey Lag Goose. *Anser anser*.

A scarce winter visitor. Small parties and single birds are occasionally seen in coastal districts often with the large flocks of Pink-footed Geese. According to Yarrell it nested in the Lincolnshire Fens before the drainage.

White-fronted Goose. *Anser albifrons*.

A winter visitor to coastal areas in small numbers. It occurs usually in small flocks of up to twelve, but occasionally in flocks of 50 or 60 and rarely of 100 or more. It is sometimes in company with Pinkfeet, though it prefers grasslands and marshes to cultivated fields. Cordeaux in 1899 referred to it as "a chance visitor" in the Humber district, and according to Caton Haigh it was almost unknown on the north-east coast until 1917, after which it became a regular visitor. A bird of the Greenland race (*A. a. flavirostris*) was identified on Croft Marsh in December, 1950.

Lesser White-fronted Goose. *Anser erythropus*.

An adult male visited tame birds of the same species in south Lincolnshire in January, 1943. A record by Cordeaux of one in the Humber district about 1874 is not entirely satisfactory.

Bean Goose and Pink-footed Goose. *Anser arvensis*.

The Bean Goose (*A. a. arvensis*) is a very scarce winter visitor, chiefly in coastal areas. It occurs occasionally further inland—small parties of four and three were seen at Newsham Lake, Brocklesby, in 1940 and 1942. It is said by Cordeaux to have occurred in large numbers in the Lincolnshire Marshland during the first half of the

19th century, but it is possible that there was some confusion between this species and the Pinkfoot. Small flocks were seen regularly during the latter part of the 19th century. It has been much scarcer during the present century, occurring usually singly and in twos and threes. It is possible that a few occur regularly in the Pinkfoot flocks.

The Pink-footed Goose (*A. a. brachyrhynchus*) is a winter visitor in considerable numbers in certain localities. Some arrive in September (rarely in the second half of August), but the majority during the first three weeks of October. During October and November there are at present (1953) two main flocks in the county: one which feeds on the northern part of the Wolds and roosts on the Humber flats around Read's Island and Whitton Sand, and another which feeds on Croft Marsh and in the East Fen and roosts on Wainfleet Sand and elsewhere in that vicinity at the north-west corner of the Wash. In October and November of 1951 at least 7,000 birds were present in the two areas, about 5,000 of them at Croft. In 1952 and 1953 the number was less. The north Lincolnshire flock has decreased considerably and has become less regular in the area during recent years. In late November or in the first half of December the main concentration of the Fenland flock shifts for a time to Holbeach Marsh and then, towards the end of December or early in January, to an area further south in the Fenland. They leave there usually between mid-February and mid-March and are sometimes seen in the Lincolnshire areas again for a few days on their way north. The times of these movements are somewhat variable, being partly dependent perhaps on the moon and on the available food.

The pattern of distribution changes from time to time and the Croft area seems to have been favoured by the geese in recent years at the expense of Holbeach Marsh; whilst the Holkham Marshes in north Norfolk, a great resort in the 1920's and 1930's, have been almost completely deserted. In the early part of the 19th century the geese are said to have frequented the country around Louth, flying to the sands between Grainthorpe and Tetney Havens to roost, but by the end of the century they had almost completely deserted this district.

It is evident from ringing recoveries that there is much interchange of birds between one feeding area and another within the British Isles throughout the winter, and in Lincolnshire skeins are frequently seen

flying overhead and occasionally feeding in other coastal and inland areas. That many of the Pinkfeet wintering in Lincolnshire breed in Iceland is shown by the recovery here during the winter of birds ringed in Iceland on their breeding grounds. Some evidently breed in Greenland also, for a bird ringed in Lincolnshire in December, 1950, was recovered in east Greenland in May, 1951.

Brent Goose. *Branta bernicla*.

A winter visitor to the Wash and to the north-east coast. There is insufficient evidence to assess its exact status in the Wash during the present century. In recent years it seems that minimum numbers have amounted to several hundreds and that in favourable winters there have been 1,000 or more. Thus in the winter of 1951-52 there was a maximum of about 1,200, and from the end of December, 1952, to February, 1953, 2,000-2,500 were present. Largest numbers occur from December to February, but a few sometimes arrive from mid-September onwards and some stay until March. On the north-east coast it is much scarcer. In most years not more than 50 or 60 are seen there. Occasionally in the past it has been more numerous, as in the hard winters of 1911-12, 1916-17 and 1928-29. In February, 1929, flocks of Brents arrived in very severe weather and at the end of that month there were 300 or 400 on the North Cotes and Tetney foreshore. They have not been recorded in such large numbers on the north-east coast since then, but they were more numerous than usual during severe weather in late January and early February, 1937. In Caton Haigh's experience the Brent was distinctly a hard weather fowl on the north-east coast, though it was not always numerous in a severe winter. He had a few records of its appearance at North Cotes in September and October, but he seldom recorded more than a few until after Christmas and often not until February. The habitat on the north-east coast, where there is much more sand than mud, is less suitable for Brents than that in the Wash. They are seldom seen far into the Humber. The dark-breasted form of the species (*B. b. bernicla*) predominates in the Wash, the pale-breasted form (*B. b. hrota*) being scarce; but according to Caton Haigh the two forms occurred on the north-east coast in about equal numbers.

It is quite clear that there has been a great decline in the numbers of Brent Geese in Britain and Western Europe during the last forty or fifty years. Blathwayt in 1914 noted a decrease on the Lincolnshire coast

but there is little evidence concerning relative numbers here over a long period of years. The disappearance in many areas of its main food, the eel grass (*Zostera* spp.), may have been partly responsible for its general decrease. Although eel grass at present occurs sparsely in the southern part of the Wash in pools on the outer edges of the saltings, it seems never to have been abundant on the Lincolnshire coast where the main food of the Brents is probably a species of *Enteromorpha*, an alga which colonises muddy shores.

Barnacle Goose. *Branta leucopsis*.

A very scarce but fairly regular winter visitor. Cordeaux in 1872 recorded the occurrence of small flocks on the north Lincolnshire Marshes, but in 1899 he stated that it was rare and of irregular occurrence in the Humber district. Caton Haigh knew it as only an extremely rare straggler on the north-east coast. There is a record of a flock of ten at Humberston in September, 1902, and Caton Haigh recorded another flock of eight at North Cotes about 1909. From then until about 1948 there were a very few records of single birds. In recent years, however, it has been seen much more frequently in the Wash and Humber areas, although usually only singly or in twos and threes, often in company with Pinkfeet. On April 11th, 1948, a flock of 20 to 25 was seen on the sands near Tetney Haven. Although it is usually seen on the shore or on coastal fields, several were seen feeding with Pinkfeet on the north Wolds some eight miles from the sea in January, 1950.

Canada Goose. *Branta canadensis*.

Semi-domesticated, like the Mute Swan. It has bred for many years in Grimsthorpe Park where up to 70 birds have been seen in August. It occurs occasionally in ones and twos and in small flocks on other inland waters. In recent years it has visited the Brocklesby Lakes and several other waters with increasing regularity in April and May.

Mute Swan. *Cygnus olor*.

A resident, breeding in a semi-domesticated state on many ornamental and other waters and on rivers. More widely distributed in winter.

Whooper Swan. *Cygnus cygnus*.

A fairly regular winter visitor to coastal and inland waters in varying but usually small numbers from October to March. It has

been most frequently recorded on passage on the north-east coast in November, usually in flocks of under 20 but occasionally of up to 50. It occurs fairly often in very small numbers on some inland waters, being most numerous during bad weather.

Bewick's Swan. *Cygnus bewickii*.

A rather scarce but fairly regular winter visitor, chiefly to coastal waters, but occasionally inland especially during bad weather. Most occurrences are in November, December and January. Whilst not so frequent as the Whooper, it sometimes occurs in larger flocks. On December 31st, 1940, 72 were seen flying over the Wolds near Limber.

Order FALCONIFORMES

Family FALCONIDAE

Golden Eagle. *Aquila chrysaëtos*.

A very rare vagrant. One is said to have been trapped at Appleby near Scunthorpe in 1834 and one was shot at Normanby Park nearby on November 1st, 1881. Since then there have been three records: one trapped at Langton near Spilsby in the second week of November, 1920; one at Maltby Wood near Louth on December 4th of the same year; and another shot at Beelsby in the winter of 1927-28 after spending about two months on the nearby Brocklesby estate feeding, chiefly on rabbits.

Buzzard. *Buteo buteo*.

A scarce and somewhat irregular passage migrant on the coast and inland, recorded chiefly in September and October. It is also an occasional winter visitor in both coastal and inland districts, especially in wooded country where it sometimes remains until March or early April. In the last few years there have been two records in May and one in June. These and some of the autumn records may be the result of the recent spread of this species in western England. Formerly a resident in the county, it nested in the woodlands around Wragby until about 1888 when the last nest was recorded.

Rough-legged Buzzard. *Buteo lagopus*.

A rare and irregular autumn and winter visitor. Until about 1920 it occurred fairly regularly on the coast in autumn (mainly during October) in variable but usually very small numbers, and less frequently inland then and later in the winter. During the last thirty years, however,

there have been few records. The most recent were in 1950 when one was seen near Holbeach on December 3rd, and in 1951 when one was seen at Skellingthorpe near Lincoln on April 24th. What was probably the same bird was found dead in the Lincoln area on May 7th.

Sparrow Hawk. *Accipiter nisus.*

A fairly numerous resident chiefly in well-wooded areas. It is also a spring and autumn passage migrant on the coast, mainly in April and between mid-September and mid-November. A female ringed at Gibraltar Point in September, 1949, in its first autumn was shot in south central Norway in July, 1951; another female ringed in early November, 1950, was shot in the same area of Norway in late June, 1952; another, a first year male, ringed in April, 1951, was recovered in north Denmark in early April, 1952, possibly on return migration to Norway. Another ringed at Fair Isle on autumn migration in September, 1951, was shot at Holbeach St. Matthew in the third week of August, 1952.

Goshawk. *Accipiter gentilis.*

A very rare vagrant. A pair attempted to nest in Normanby Park near Scunthorpe in 1864 but the female was shot. Single birds were shot or trapped near Louth in December, 1830, on May 23rd, 1871, and on April 29th, 1910. Since 1914 there have been two records, one at Normanby on October 5th, 1919, and another at Miningsby near Spilsby on September 14th, 1935.

Kite. *Milvus milvus.*

There have been no records of the Kite during the present century. It was formerly a common resident in Lincolnshire. Its last breeding places, like the Buzzard's, were the woodlands around Wragby where the last nest was recorded—in Bullington Wood—in 1870. Save for two unsuccessful attempts in Devon and Cornwall during the present century, this was the last record of the Kite breeding in England.

White-tailed Eagle. *Haliaëtus albicilla.*

A rare vagrant which has not been recorded for twenty years. Previously during the present century there were at least five records of it, as follows: at Grainsby near North Cotes in February, 1904; at Manton near Brigg in February, 1916; at Grainsby in autumn, 1920; at North Cotes in January, 1927, and at Aswarby near Sleaford in March, 1933. Writing in the late 1930's Caton Haigh

mentioned at least five having been seen in Grainsby Park "during the last forty years". Only the two Grainsby records given above have been traced, however. He also said that it had been seen at North Cotes "on several occasions", but again only the one record for the present century has been found.

Honey Buzzard. *Pernis apivorus*.

A rare vagrant. One is said to have been shot near Scotton about 1850 and another at Market Rasen in 1896. Both these specimens are in the Lincoln Museum. In the first decade of the present century it occurred rather more frequently and Blathwayt gave five records from various parts of the county between 1902 and 1908, all in September and October. Since then, however, it has been recorded only twice: on June 30th, 1947, when one was seen at Limber near Brocklesby (a bird which was probably the same was shot nearby a few days later), and on July 1st, 1951, when one was trapped near Brigg.

Marsh Harrier. *Circus aeruginosus*.

A scarce visitor but recorded much more frequently in the last ten years than formerly, especially in the Wash area. Blathwayt gave five 19th century records, but none after 1875. Caton Haigh knew of only one occurrence at North Cotes, in November, 1935, and this appears to be the first record since 1875. Since 1944, however, one or two have been seen in coastal districts most years and five were seen in 1952. It has occurred in almost every month between March and November, but most frequently in May and in August and September. It is said to have nested in the Isle of Axholme in 1836.

Hen Harrier. *Circus cyaneus*.

A passage migrant and winter visitor in small numbers chiefly in coastal areas. It has occurred in every month from August to April, but mainly between October and March and most frequently in October and November. It formerly bred in several localities in the north of the county, the last time being on Raventhorpe Common near Scunthorpe in 1872.

Montagu's Harrier. *Circus pygargus*.

A scarce visitor to coastal districts, chiefly between May and August but occasionally until October. Like the Marsh Harrier, it has been seen much more frequently during the last few years. Blathwayt had no satisfactory records of it in 1914, and it does not appear to have

been recorded in the county until October, 1935, when one was shot at North Cotes. No more were reported until 1949 when one was seen at Gibraltar Point in late June and early July and another at Cleethorpes in mid-August. In 1951 a pair nested unsuccessfully in the county in June and birds were seen on five occasions in the Wash area in May, June and August of that year. In 1952 a female was seen in mid-May at the breeding place of the previous year and another, possibly the same bird, several miles away a few days later. Another female was reported at Rothwell near Caistor, also in May, and four harriers seen at Gibraltar Point in late May and June were thought to be of this species. In 1953 an immature bird was seen at North Cotes in late July.

Osprey. *Pandion haliaëtus*.

A very rare vagrant. Blathwayt gave five or six records in the second half of the last century, but there have been only three since 1900: one at Scawby near Brigg on May 10th, 1900, one at Theddlethorpe near Mablethorpe in late November, 1920, and one at Brocklesby in early June, 1936.

Hobby. *Falco subbuteo*.

A very rare vagrant recorded only twice during the last thirty years. On March 9th, 1929, there was a pair in a wood on the Brocklesby estate, and on April 18th, 1932, a single bird in the same place. According to Cordeaux in 1872, the Hobby still bred annually in woodlands near Louth and Wragby, and it had evidently been widespread in woods in south Lincolnshire also before that date. In 1899 Cordeaux stated that it had become much rarer but that it still nested in the county. Even in 1914 Blathwayt considered that a few pairs probably still bred in some of the larger woodlands, though it is evident that no nest had been found for some years.

Peregrine. *Falco peregrinus*.

A passage migrant and winter visitor in small numbers, chiefly in coastal districts but not infrequently inland. It occurs from September to April but most frequently in October and November. One ringed as a nestling in the Vesteraalen Islands, north Norway, in July, 1943, was shot in Swaton Fen near Sleaford in December of the same year. A bird of the North American race (*F. p. anatum*) was caught in a plover-decoy at Tetney on September 28th, 1910.

Gyr Falcon. *Falco rusticolus*.

One, attributed to the Icelandic race (*F.r. islandus*), was shot at Saxilby near Lincoln in December, 1900. The specimen, a young female, is in the Lincoln Museum. Another, attributed to the Greenland race (*F.r. candicans*), was recorded by Cordeaux as having been trapped at Twigmoor in 1826.

Merlin. *Falco columbarius*.

A passage migrant and winter visitor. Coastal movement takes place from late August to November, but migrants are usually most numerous in October. Return movement of much smaller numbers takes place in April. In 1949 one was seen at Tetney Haven in late June. In winter, when it is rather less common, it occurs both on the coast and inland. Breeding was recorded at Branston Booths near Lincoln about 1860 and on Manton Common in 1862 and 1875.

Red-footed Falcon. *Falco vespertinus*.

One was shot from a vessel at the mouth of the Humber in early November, 1864; another was shot at Panton near Wragby on May 15th, 1902.

[Lesser Kestrel. *Falco naumanni*.

Blathwayt gave a sight record by Cordeaux at Riby Park on November 5th, 1880, but he admitted this to be doubtful.]

Kestrel. *Falco tinnunculus*.

A fairly numerous and well-distributed resident. A passage migrant on the coast in spring, chiefly in March and the first half of April; and, in larger numbers, in autumn from August to early November. In August and September many frequent the salt-marshes and newly reclaimed land in the Wash and on the north-east coast. Quite large concentrations of as many as 30 birds sometimes occur in one area. On September 12th, 1952, 68 were seen in the air at once at the Nene mouth. Later migrants seldom stay so long on the coast. There seems to be considerable local movement of British-bred birds. Kestrels ringed as nestlings in Warwickshire and east Yorkshire have been recovered in Lincolnshire in winter, and another, ringed in Cumberland, was recovered near Scunthorpe in July. Some, however, evidently emigrate. One ringed as young at Goxhill in June, 1947, was recovered at Breteuil (Eure), north-west France, in January, 1953.

Order GALLIFORMES

Family TETRAONIDAE

[Red Grouse. *Lagopus scoticus*.

According to Blathwayt it was an occasional vagrant from the Yorkshire Moors to north-west Lincolnshire into which district many were said to have been driven by rough weather about 1835. This was recorded on the authority of an old man by M. Peacock who is said to have shot grouse himself in the north-west of the county. This evidence cannot be regarded as at all satisfactory.]

Black Grouse. *Lyrurus tetrix*.

Formerly resident in small numbers on the heaths of the north-west where it was probably introduced. There were still one or two pairs on Scotton Common in 1935, but it is not known whether any survive there at the present time. It also occurred until the 1880's on the moors on the Lincolnshire-Nottinghamshire border south-west of Lincoln.

Family PHASIANIDAE

Red-legged Partridge. *Alectoris rufa*.

An introduced species which is now a widespread resident and almost as abundant as the Common Partridge.

Partridge. *Perdix perdix*.

A common resident in all districts.

Quail. *Coturnix coturnix*.

A very scarce and irregular summer visitor. A few pairs breed occasionally in the north Wolds area and perhaps in the Heath district south of Lincoln and elsewhere. Six or seven birds were heard calling in June and July, 1945, in the Leadenham district, but none in 1946. Nests were reported at Limber and Goxhill in 1947, and in the following autumn small bevvies were seen on Wrawby Moor near Brigg and on Barkston and Honington Heaths in Kesteven. One was heard calling at Limber in June, 1948. In 1952 it was reported from several places in the north of the county and at Ancaster near Grantham. In early July, 1953, one was recorded at Keelby near Brocklesby. Single birds have been seen occasionally in winter.

In the early part of the 19th century it is said to have been much more plentiful, but both Cordeaux in 1899 and Blathwayt in 1914 described it as an irregular breeder on the Wolds, in the Heath district south of Lincoln and elsewhere.

Pheasant. *Phasianus colchicus*.

A common resident in almost all districts, being especially abundant where it is preserved.

Order RALLIFORMES

Family BALEARICIDAE

Crane. *Megalornis grus*.

A very rare vagrant. There have been only three records in the last hundred years. One was recorded at Hykeham near Lincoln in July, 1869, and another at Spalding in October, 1882. On October 25th, 1953, a party of nine, including some juveniles, was seen at Humberston near Cleethorpes. The Crane may have nested in the Lincolnshire Fens until the 17th century but the evidence is scanty.

Family RALLIDAE

Water Rail. *Rallus aquaticus*.

A scarce resident, passage migrant and probably winter visitor. It is present in summer and probably nests in marshy places in several areas, but breeding has been proved in only one locality—near the Humber—in recent years. It is more numerous and widespread in winter, especially near the coast where there is also a well-marked increase at the times of spring and autumn passage, mainly in April and in October and November.

Spotted Crake. *Porzana porzana*.

A very rare vagrant, recorded only four times during the last twenty years: at Horncastle on March 15th, 1930, at Aswarby near Sleaford on May 8th, 1944, at Barton-on-Humber on April 30th, 1952, and at Fosdyke on September 13th and 14th, 1952. It was formerly a summer visitor nesting in small numbers in several localities, chiefly in the north-east and north-west of the county and possibly in the Fens. Caton Haigh stated that it nested near Tetney until the end of the last century and according to Blathwayt in 1914 it still nested in suitable spots in the county. It also seems to have occurred more frequently on autumn migration up to that time.

[Little Crane. *Porzana parva*.

Possibly a very rare vagrant but none identified with certainty. Cordeaux recorded that he saw one at Great Cotes on October 9th, 1869, but he gave no supporting evidence of identification. Caton Haigh gave three records of crakes which he thought to be of this species on the north-east coast in 1888, 1907 and 1930, all in October. A small crane thought to be of this species was seen at Gibraltar Point on August 16th, 1953.]

Corncrake. *Crex crex*.

A scarce passage migrant in spring and autumn in coastal and inland districts. Formerly it was a widespread summer visitor in variable numbers, nesting in low-lying meadows. According to Blathwayt it was still not uncommon in some districts in 1914, but in parts of the county it had "of late years become unaccountably rare or absent altogether". It seems probable that few, if any, nested after about 1920. Before its decrease it was also more numerous on passage, occurring in small parties as well as singly.

Moorhen. *Gallinula chloropus*.

A very common resident nesting on or near almost all ponds, lakes and streams.

Coot. *Fulica atra*.

A resident and winter visitor. It nests on the larger ponds and lakes, but is much scarcer than the Moorhen. It is more numerous and widespread in winter when it sometimes occurs on coastal estuaries, especially during hard weather.

Family OTIDIDAE

Great Bustard. *Otis tarda*.

Formerly bred on the Wolds but ceased to do so probably in the late 18th or even early 19th century. Two were shot in the north-east of the county in December, 1902. The latter may not have been genuine migrants, however, since attempts had been made to re-introduce the species into Norfolk two years earlier.

Little Bustard. *Otis tetrax*.

A very rare vagrant. One was shot near Alford in 1856 and another on Welbourn Heath near Leadenham about 1865. One was

seen at Walcot near Scunthorpe on January 22nd, 1912. A bird at Limber in early April, 1936, was probably of this species. Another shot at Addlethorpe near Skegness on November 22nd, 1933, was critically examined and proved to be of the Eastern race *O.t. orientalis*.

Houbara Bustard (Macqueen's Bustard). *Chlamydotis undulata*.

One shot near Kirton-in-Lindsey on October 7th, 1847, belonged to the race *C. u. macqueenii*.

Order CHARADRIIFORMES

Family HAEMATOPODIDAE

Oystercatcher. *Haematopus ostralegus*.

A common passage migrant and winter visitor on the coast. First autumn arrivals are usually about mid-July and large numbers are present by mid-August. Most winter residents leave in March, but passage of smaller numbers continues until the end of May. One ringed as a juvenile at Salthouse, Norfolk, in June was recovered near Spalding in the following December. Single pairs breed in several localities on the coast. In the Wash it usually nests on the landward side of the sea wall on the reclaimed marshes. In the north-east it has also nested on cultivated fields adjoining the sea-bank and there is a record of a nest two miles inland near the Louth Canal. It seems to have been much commoner as a breeding species in the last century when the seashore was much less disturbed.

Family CHARADRIIDAE

Lapwing. *Vanellus vanellus*.

Resident, passage migrant and winter visitor. It is well distributed in the breeding season on both hills and lowlands, but it has decreased considerably in recent years. It is not certain when a decrease began. Cordeaux noted one in the Humber district in 1899, but this may have been only temporary since Blathwayt made no mention of any decrease in his 1914 List. It has recently been suggested that an increase in ploughland may be responsible for the widespread decrease in the number of breeding Lapwings. The birds seem to prefer this habitat for nesting, but, as a result of the various operations of drilling, harrowing and rolling, they have comparatively little success on it. Certainly the decrease of breeding Lapwings in Lincolnshire has been

most marked in the last twelve years or so when there has been a great increase in the amount of arable land. It is still quite numerous in some districts, especially on the Wolds where it seems now (1953) to be holding its own and perhaps increasing again. It is an abundant winter visitor, especially in coastal districts where flocks sometimes number several thousands. Continental immigrants arrive on the coast in autumn and there is complex passage migration, chiefly in September, October and November and again in February and March, but frequently also at other times. Whilst many of the immigrants may move on to other parts of Britain, a large number winter in Lincolnshire. Ringing recoveries show that these immigrants come from Lithuania, the Baltic Islands, south Sweden, south-west Norway, Denmark, Schleswig-Holstein and Holland. In addition, one ringed as a nestling in western Hungary was recovered in Lincolnshire in August of the same year. Until the use of live decoys was made illegal in 1925 thousands of Lapwings were taken in nets in the Marsh district for the London markets, a practice which continued on a smaller scale with stuffed decoys until 1946 when the Lapwing received complete protection in Lindsey. (See Fig. 4).

Ringed Plover. *Charadrius hiaticula*.

Resident, passage migrant and winter visitor. It nests on the coast on sandy and shingly beaches, sparsely in most areas, but more commonly between Skegness and Gibraltar Point where there are usually about thirty pairs. Passage migration on the coast occurs mainly between mid-March and mid-May, and again from the beginning of August to mid-October. There is also evidence of some inland passage. Winter numbers are comparatively small. Breeding birds and probably most migrants belong to the race *C. h. hiaticula*, but a bird of the Arctic race (*C. h. tundrae*) was obtained near Boston in August, 1942.

Little Ringed Plover. *Charadrius dubius*.

A pair bred at a gravel-pit in the county in 1950, 1951, 1952 and 1953. Two (a pair?) occurred on passage at Gibraltar Point on April 30th, 1951, and one on June 16th, 1952. In 1953 one was seen at the Nene mouth on July 26th, one at Wisbech sewage-farm on August 13th, and one near Horncastle on November 29th, a late date. There were no records before 1950.

Kentish Plover. *Charadrius alexandrinus*.

A very rare vagrant. The only recent record is of three at Gibraltar Point on April 13th, 1950. Between 1902 and 1905 one or more pairs nested on the shore at Humberston on the north-east coast and at least four clutches of eggs are known to have been taken. One of these is now in the possession of the City and County Museum at Lincoln and its identity has recently been confirmed at the British Museum. It was taken from a nest on June 1st, 1903, by B. A. Pye of Cleethorpes who has made these facts known in correspondence. Three other clutches, said to have been taken by other collectors between 1902 and 1905, have not been traced. Pye did not see the birds himself, though he did not specially look for them being more interested at that time in the finding of the eggs. Apart from these, the only record is of one shot near Friskney on October 8th, 1881.

Grey Plover. *Charadrius squatarola*.

A coastal passage migrant and winter visitor. Spring passage occurs chiefly from mid-April and lasts until the first or second week of June. Autumn movement begins about mid-July and continues until mid-October, the species being more numerous in autumn. Many remain during the winter and a few occasionally throughout the summer. It is seldom seen away from the seashore, but in the north-east it resorts to coastal fields when high spring tides cover the whole shore, and 150 were seen on Cowbit Wash in October and December, 1953.

Golden Plover. *Charadrius apricarius*.

A passage migrant and winter visitor. Passage movement takes place on the coast and inland usually from mid-August (occasionally from late July) until November, and there is sometimes irregular movement later in the winter. Passage takes place again in the spring from late February until May, but more observation is needed before the pattern of movement can be clearly distinguished. It winters in considerable numbers, particularly in the Marsh and Fen and in the Trent valley, but also on the Wolds and Heath. It seems to have decreased in recent years. Both the Northern (*C. a. altifrons*) and the Southern (*C. a. apricarius*) races are known to occur.

Dotterel. *Charadrius morinellus*.

A rare and irregular passage migrant in spring and even rarer in autumn. Before the middle of the last century it is said to have

been a regular spring migrant in considerable numbers in certain localities, especially on the Wolds and in the Marsh. Cordeaux in 1872 noted a great decrease in these areas and stated that it had become only a rare and occasional visitor. In 1899 he confirmed the decrease but stated that, although in only small numbers, it continued to visit the old localities with tolerable regularity. Brogden in 1900 noted a similar decrease in the Spalding district where it had then become only a casual visitor. In 1914 Blathwayt stated that it still occurred in small numbers on the Wolds in May and that it visited also coastal districts and the Heath south of Lincoln where it was a regular spring and occasional autumn visitor to Rauceby Heath. Caton Haigh described it as woefully reduced in numbers in the north-east, but still appearing not infrequently in May, usually on pasture and arable fields. During the last thirty years, however, it seems to have become less regular and even less numerous. Caton Haigh recorded a flock of fifty at Marshchapel in mid-May, 1922, which he described as the largest 'trip' in recent years. Since then, parties of only four or five birds have been the largest and there have been only about half a dozen records altogether. It does not appear to have been recorded at all since 1946. The last 'trip' reported on the Wolds was one of twelve at Cadeby near Louth in May, 1922. All the more recent records have been in the north-east coastal area. In spring it has occurred chiefly in May, but occasionally in the second half of April; in autumn, chiefly in the second half of August and in September, but occasionally as late as November—Caton Haigh recorded three on November 24th, 1921, an exceptionally late date.

Turnstone. *Arenaria interpres.*

A coastal passage migrant and winter visitor. Autumn passage extends from mid-July to about mid-October, but migrants are most numerous in August and September. Spring migration takes place from early April onwards, chiefly during May and the first week of June. On most parts of the coast it is scarce and often absent in winter, but it occurs regularly, sometimes in considerable numbers, on the mussel-beds in the Wash. A few non-breeding birds are sometimes present throughout the summer.

Family SCOLOPACIDAE

Dowitcher (Red-breasted Snipe). *Limnodromus griseus.*

One shot at Humberston on August 15th, 1882, is the only record of this American species.

Snipe. *Capella gallinago.*

A resident, passage migrant and winter visitor. It nests in suitable marshy areas throughout the county, but is common in only a few localities where there is extensive marshy ground. It is much more numerous and widespread in winter when Continental immigrants are doubtless present. Passage movement takes place in coastal districts from mid-August to November and again in March and April.

Great Snipe. *Capella media.*

A rare passage migrant in September and October. Blathwayt gave six records prior to 1914, and there have been at least four authentic records of it since then: at Grantham sewage-farm on September 12th, 1938; at Tetney on September 20th, 1939; at Rothwell near Caistor in September, 1947, and on October 3rd, 1952. These four birds were shot.

Jack Snipe. *Lymnocyptes minimus.*

A passage migrant and winter visitor in variable but seldom large numbers. It occurs on passage in September, October and November, the majority usually arriving in October. Later in the winter numbers diminish—except during hard weather movements—and very few are seen on return migration in March and April.

Woodcock. *Scolopax rusticola.*

A resident, passage migrant and winter visitor. It breeds in small numbers in woodlands in several parts of the county, being most numerous and most regular in the north-west. Many breeding birds are probably sedentary—nestlings ringed on the Scawby estate near Brigg in May have been recovered there in the following winter—but there is considerable immigration from the Continent in autumn, mainly in October and the first half of November. Some of these immigrants doubtless winter in the county for the Woodcock is then more numerous and more widespread in woodlands, but others pass on westwards. There is a return migration mainly in March and the first half of April. One ringed at Gibraltar Point in March, 1950, was shot near Denbigh, North Wales, in January, 1952. It may have been a Continental bird ringed on return migration and wintering again in Britain.

Curlew. *Numenius arquata.*

A common passage migrant and winter visitor, chiefly in coastal areas but there is also migration inland through the county. Passage

migrants and wintering birds arrive on the coast from early July onwards and leave from March to May. Numbers of non-breeders remain on the coast throughout the summer. Many birds which winter on the coast roost on the shore and flight inland each morning to feed, often for several miles; others feed on the mudflats and saltings, spreading out over the shore at low tide. Some of these wintering birds are of Continental origin. Two ringed as juveniles on the island of Oland off the coast of Sweden in June were recovered in Lincolnshire, one of them in the following November, the other in January eight years later. Two other juveniles, one ringed in central Sweden, the other in central Finland, were recovered here in the following September and January. A few pairs of Curlews nest regularly in the heath district in the north-west of the county and there is some indication of an extension of range in this area.

Whimbrel. *Numenius phaeopus.*

A passage migrant on the coast and flocks may often be seen and heard passing overhead far inland. It occurs from mid-April to early June and from mid-July to October, but it is most numerous in May and again in August and early September. Non-breeding birds are occasionally recorded in summer.

Black-tailed Godwit. *Limosa limosa.*

A passage migrant in spring and autumn, chiefly in coastal districts. It occurs on autumn passage from early July until about mid-October, but is usually most numerous from late July to the end of September. It is much less frequent in spring when it has been recorded chiefly in April. It occurs exceptionally during the winter. Although still scarce, it has occurred more frequently in recent years in most coastal areas especially in the Wash. In the Welland estuary in 1952 it was present from early July onwards, a maximum number of 124 being recorded in mid-September. In 1953 about 100 were seen in the same area at the end of August. On the north-east coast Caton Haigh had only five records of it in the fifty years between 1885 and 1935, but there too it has been seen more frequently in the last ten years, though still in small numbers. A pair nested in the Fenland area in 1940, 1941 and 1942. Before the final reclamation in the early 19th century it nested regularly in the Lincolnshire Fens. A nest is said to have been found near Wainfleet in 1885.

Bar-tailed Godwit. *Limosa lapponica*.

A common passage migrant and winter visitor on the coast. In autumn it begins to arrive about mid-July, but seldom in large numbers until after mid-August. Passage movement continues until the end of October, but many spend the winter on the coast, probably in larger numbers in the Wash than elsewhere. Most winter residents leave in March, but comparatively small numbers are seen on passage until the end of May. A few non-breeding birds are sometimes present throughout the summer. One ringed on passage at Jaeren in Norway on October 4th, 1938, was recovered eight days later in Lincolnshire. Although usually shore-feeders, Bar-tailed Godwits in the southern part of the Wash sometimes flight inland to feed.

Green Sandpiper. *Tringa ochropus*.

A passage migrant frequenting inland waters and coastal creeks and pools. It is usually quite numerous in autumn chiefly from about mid-July to mid-September, but is much scarcer in spring when it occurs mainly in April and early May. It is seen occasionally during the winter, and has, in fact, been recorded in the county in every month of the year.

Wood Sandpiper. *Tringa glareola*.

A scarce autumn passage migrant in coastal districts and, more rarely, inland. It occurs from mid-July to early October but chiefly in August. It was more numerous than usual in August, 1952. There are only two spring records, one in late April, the other in early May. Cordeaux reported that eggs of this species were taken on Scotton Common in May, 1871, but the record is not acceptable on the evidence which he gave.

Common Sandpiper. *Tringa hypoleucos*.

A passage migrant, mainly from mid-April to the end of May and, in larger numbers, from early July to late September, rarely into October (once December). It occurs by inland waters and, in autumn especially, on tidal creeks and estuaries. Cordeaux reported that two pairs bred at Saltfleet Haven in 1893, but he gave no details.

Redshank. *Tringa totanus*.

A resident, breeding plentifully on coastal salt-marshes and, more sparsely, inland along river valleys and in other extensive marshy places.

Although it was common in the undrained fenland, Cordeaux, writing in 1872, was not aware that it nested in Lincolnshire at that date. In 1899, however, he reported that it had begun to breed again in the Humber district. Blathwayt in 1914 noted a further increase and an extension of range to inland localities, and these have continued since then. In winter considerable numbers occur on the coast and these include Icelandic and probably Continental as well as British birds which belong to the race *T. t. britannica*. More than twenty specimens of the Icelandic race (*T. t. robusta*) have been obtained in Lincolnshire between August and February. There is also much passage movement of Redshanks on the coast, especially in autumn, but the pattern of migration is complex and requires further observation.

Spotted Redshank. *Tringa erythropus*.

An autumn passage migrant in small numbers, chiefly on the coast but occasionally inland. It seems to be rather more numerous in the Wash than on the north-east coast. It occurs from about mid-July to the end of October (rarely until mid-November). It is much scarcer in the spring, in April and May. There are a very few winter records.

Lesser Yellowlegs (Yellowshank). *Tringa flavipes*.

One shot at Tetney on September 15th, 1932, is the only record of this American species.

Greenshank. *Tringa nebularia*.

A passage migrant, chiefly on the coast but also frequently inland. In spring, it occurs from mid-April to early June but most frequently during May; in autumn, when it is more numerous, from mid-July to late October but chiefly during August and September. It occurs singly and in small parties. According to Caton Haigh it had become scarcer on the north-east coast by the early 1930's.

Knot. *Calidris canutus*.

An abundant passage migrant and winter visitor on the coast. It occurs in immense numbers during the autumn migration and throughout the winter, when flocks of many thousands may be seen feeding on mud flats or resting on certain dunes and sand-ridges at high water. Winter flocks begin to decrease after the middle of March, but passage migration of comparatively small numbers takes place during April and May. Small parties of non-breeders frequently occur during the

summer. Return movement in autumn begins in the second week of July, but large numbers seldom arrive until mid-August. Migrants ringed in autumn on the North Sea coast of Germany and in south Norway have been recovered on the north-east coast of Lincolnshire later in the same autumn and in the following winter.

Purple Sandpiper. *Calidris maritima*.

A rare and irregular autumn and winter visitor. Caton Haigh described it as an extremely rare straggler on the north-east coast. He recorded only single birds in the autumn months from August to November. The only recent records are of two at Cleethorpes on February 5th, 1949, and one at Gibraltar Point on April 14th, 1950, and on August 12th, 1953. The Lincolnshire coastal habitats are nowhere to its liking.

Little Stint. *Calidris minuta*.

An autumn passage migrant on the coast in varying numbers from the second week of August to early October. It is usually rather scarce but occasionally it appears in some numbers. There have been no spring records. It prefers salt-marsh and freshwater pools to the open seashore.

Temminck's Stint. *Calidris temminckii*.

A very rare vagrant. Blathwayt gave four 19th century records, two from the north-east coast, one from the Lincoln district and another from Kirton Marsh in the south of the county. The only record during the present century is of one caught in a plover-decoy at Conisholme near North Cotes on September 25th, 1931.

Pectoral Sandpiper. *Calidris melanotos*.

One seen near Gibraltar Point on October 12th, 1948, is the only record. Several others were seen in the British Isles during the same autumn.

Dunlin. *Calidris alpina*.

A common coastal passage migrant and winter visitor. It is the most widespread wader on most parts of the coast in winter, but it has probably decreased in numbers during the last thirty years or so. Caton Haigh stated that there had been a marked decrease on the north-east coast during the 1920's and 1930's—this he attributed to an increase in shore-shooters—and the “immense” winter flocks of which

Blathwayt wrote in 1914 are now seldom to be seen anywhere. Departure and arrival of winter visitors and movements of passage migrants have not been clearly distinguished and need further observation. Spring passage is in progress until the end of May or early June and return movement, involving larger numbers, usually begins about mid-July and continues until October and possibly later. Some non-breeding birds are usually present throughout the summer. A breeding bird ringed in Denmark in late July was recovered in north Lincolnshire in the following autumn. A migrant ringed in south Norway and two ringed on Oland Island, south Sweden, in autumn were recovered on the Lincolnshire coast later in the same autumn and following winter. Both the Northern (*C. a. alpina*) and Southern (*C. a. schinzii*) races are known to occur in Lincolnshire. Until the end of the 19th century a few pairs of Dunlins are said to have nested on one of the heaths in the north-west.

Curlew Sandpiper. *Calidris testacea*.

A coastal passage migrant, chiefly in autumn from late July to mid-October, and only rarely in spring chiefly during May. It occurs in varying numbers, being scarce most years, but occasionally—as in 1950 and 1953—more numerous.

Sanderling. *Crocethia alba*.

A common coastal passage migrant and winter visitor. During periods of migration flocks often number several thousands in favoured localities, but winter numbers are considerably smaller. Most winter visitors depart in March and early April, but the main spring passage takes place during May and the first week of June. Some remain throughout the summer. Return movement, when numbers are greater, is from the second or third weeks of July to mid-October. The Sanderling prefers sandy shores and for this reason is much more numerous at Gibraltar Point and on the north-east coast than in the southern part of the Wash. The extensive sandy flats at Gibraltar Point are particularly favourable for it.

Buff-breasted Sandpiper. *Tryngites subruficollis*.

One shot at North Cotes on September 20th, 1906, is the only record of this American species.

Ruff. *Philomachus pugnax*.

A passage migrant in small but perhaps increasing numbers, mainly on the coast but also on sewage-farms and flood-waters inland. In autumn it occurs from about mid-July to the end of October, but chiefly from mid-August to the third week of September. It is much less frequent and less regular in spring—during March and April—and occasional in summer. It has also been recorded very rarely in winter from November to February. It occurs singly and in small parties of up to five or six, but occasionally in recent years of up to twenty on the coast especially in autumn. It nested in the Fenland until the final reclamation of the early 19th century and later on the heaths of the north-west. The last eggs were taken on Scotton Common in 1882. It was also a much more abundant passage migrant in both spring and autumn until the middle of the 19th century.

Family RECURVIROSTRIDAE

Avocet. *Recurvirostra avosetta*.

A rare vagrant. Blathwayt gave no definite record for the present century prior to 1914, but Caton Haigh recorded one shot at Cleethorpes on November 21st, 1910. Since 1914 only six have been recorded: four of them on the north-east coast between mid-August and the end of October, one at Fosdyke on the Welland on April 14th, 1952, and one at Tetney on May 28th, 1953. It formerly nested on coastal marshes in the Wash and the Humber. Gough's edition (1806) of Camden's *Britannia* mentioned vast numbers of Avocets near Fosdyke Wash during summer, and Montagu also spoke of them as breeding in the Lincolnshire Fens about the same time. The last eggs taken in the county came from an island at the mouth of the Trent about 1840.

[Black-winged Stilt. *Himantopus himantopus*.

A specimen obtained in the London market in July, 1824, and said to have been sent from Lincolnshire is figured in Yarrell's *British Birds* (4th edition). One in the Lincoln Museum is labelled "Wainfleet 1888", and Blathwayt believed a specimen in the Grantham Museum to be a Lincolnshire bird. For none of these records is the available evidence satisfactory.]

Family PHALAROPODIDAE

Grey Phalarope. *Phalaropus fulicarius.*

A rare and irregular visitor occurring most frequently in September after south-westerly gales. Blathwayt in 1914 stated that there had been "about twelve recent records". There have been five since then, in 1928, 1929, 1934, 1935, and 1949. All of these were on the north-east coast, four of them in the second half of September and one in mid-November.

Red-necked Phalarope. *Phalaropus lobatus.*

A very rare and irregular visitor. There were five records from the north-east coast between 1899 and 1914 and there have been three since—one in 1918 and two in 1934—from the same area. Five of these occurrences were in October, two in September and one in early June.

Family BURHINIDAE

Stone Curlew. *Burhinus oedicnemus.*

A rare vagrant most frequently recorded in recent years on the coast at Gibraltar Point. Two, probably three, were seen there in the spring of 1950 between early April and mid-May; and three in the autumn, one at the end of July and two together in the fourth week of September. In 1951, one was seen in the fourth week of July. During the last thirty years there have been only three other records: one at North Cotes in early March, 1935, one on the Wolds near Caistor in the early summer of 1952—this bird was heard calling and was later seen in a chalky field, but there was no evidence of nesting—and one shot at Goxhill in mid-September, 1953. It formerly nested on the heaths in the north-west of the county, but became scarce after about 1870 and finally ceased to nest in the early years of the present century.

Family GLAREOLIDAE

Pratincole. *Glareola pratincola.*

One shot at Branston near Lincoln on August 15th, 1827, and recorded by Yarrell.

Cream-coloured Courser. *Cursorius cursor.*

One obtained on the north-east coast near Marshchapel about 1840.

Family STERCORARIIDAE

Arctic Skua. *Stercorarius parasiticus.*

A coastal passage migrant in autumn in varying but sometimes considerable numbers. It occurs from the third week of July, but is most numerous during August, September and October. There are occasional stragglers until mid-November. There are no records of spring migrants. In August and September, Arctic Skuas may be seen almost daily harassing terns over or near the shore, but in October they are usually seen singly or in small parties passing over the sea.

Great Skua. *Stercorarius skua.*

A rare autumn and winter visitor on the coast. Blathwayt knew of only two 19th century records and there have been only seven during the present century, three in September and one in October, November, December and January. One ringed as a nestling at Hermaness in the Shetlands in July was recovered in Lincolnshire in the following September.

Pomarine Skua. *Stercorarius pomarinus.*

In Caton Haigh's experience this skua was a fairly regular visitor in small numbers in September and October on the north-east coast, but there appear to have been no records of it since 1933. This may be due to lack of observation.

Long-tailed Skua. *Stercorarius longicaudus.*

A rare and irregular visitor to the coast in autumn. Four were obtained and several others seen at North Cotes in September and early October, 1912. One was found shot at Tetney Haven on August 17th, 1948, and another was picked up dead inland near Gainsborough on November 15th, 1949.

Family LARIDAE

Ivory Gull. *Pagophila eburnea.*

One was seen by Cordeaux in late March, 1883. He gave another record of one shot on the coast in the mid-19th century but the evidence for this is scarcely adequate.

Great Black-backed Gull. *Larus marinus.*

A common coastal passage migrant and winter visitor. Some non-breeding birds remain throughout the summer. It is particularly

numerous on sand and mud flats in the Humber and Wash estuaries. Largest numbers usually occur in August and September, but passage movements require investigation. That some Continental birds winter on the Lincolnshire coast is shown by the recovery here in January and December of birds ringed as juveniles in west Norway in the previous summer.

Lesser Black-backed Gull. *Larus fuscus*.

A passage migrant on the coast and in smaller numbers inland from March to May and again from July to November. On the coast during these periods it occurs occasionally in considerable numbers, but is often relatively scarce. Small numbers winter on the coast. Some of these have been identified as belonging to the Scandinavian race (*L. f. fuscus*), but others are British-bred birds of the race *L. f. graellsii*. One ringed in Lancashire in July, 1934, was recovered at Grimsby in February, 1935. Non-breeding birds occur on the coast in summer. Cordeaux in 1899 wrote of immense numbers frequenting the Humber and the north-east Lincolnshire coast in autumn, winter and spring; but according to Caton Haigh it was by no means a common bird at the Humber mouth, and Blathwayt too described it as a rather scarce visitor from autumn to spring. It is possible that Cordeaux's estimates of numbers were based on mis-identification.

Herring Gull. *Larus argentatus*.

A common winter visitor and passage migrant occurring mainly on the shore and in coastal districts, but it is becoming increasingly frequent in winter far inland. Many non-breeding birds are present on the coast in summer. Ringing records show some birds from breeding sites on the east coast of Scotland to be in Lincolnshire in their first winter from September to January. British-breeding birds belong to the race *L. a. argentatus* whose breeding range extends from north-west France to the southern Baltic. Continental birds doubtless occur on the Lincolnshire coast both on passage and in winter. A bird of the North European race (*L. a. omissus*), which had been ringed on the Murman coast of north-west Russia in July, 1941, was recovered on the Lincolnshire coast in February, 1942.

Common Gull. *Larus canus*.

A common winter visitor and passage migrant both on the coast and inland. Immature birds are present throughout the summer. Well-

defined spring and autumn passage movement through the county requires further observation. Some migrants and winter visitors are probably of British origin; some are certainly Continental. Birds ringed as juveniles in south Norway, east Denmark and south Sweden have been recovered in Lincolnshire in January, February and April.

Glaucous Gull. *Larus hyperboreus.*

A very scarce winter visitor to the coast. Caton Haigh found it somewhat rare at North Cotes where it usually occurred in mid-winter, though he had recorded it as early as October 12th. According to Cordeaux in 1899 it then occurred in the Humber district every winter. There have been only four records during the last ten years, three in December and one in early March.

Iceland Gull. *Larus glaucoides.*

A very rare vagrant. There are only two definite records: one in the Humber on April 18th, 1872, and another, more recently, near Boston on December 9th, 1942.

Mediterranean Black-headed Gull. *Larus melanocephalus.*

One at Gibraltar Point on August 6th, 1949, is the only record.

Little Gull. *Larus minutus.*

Mainly an autumn and winter visitor to the coast. It is still scarce but has been more regularly recorded in recent years. Most records have been of immature birds in August and the first half of September, but it has been recorded once in May and twice in July (one on July 2nd, 1949, was in adult breeding plumage) and in all the winter months from October to March. One record was from an inland locality. On September 12th, 1948, four were seen together near Humberston and there were five records of single birds at Gibraltar Point in the autumn of 1951. One ringed as a young bird in south Sweden in July, 1937, was recovered in Lincolnshire in November of the same year, and another ringed as an adult in Lincolnshire in February, 1915, was recovered in Denmark in February, 1916.

Black-headed Gull. *Larus ridibundus.*

Resident, passage migrant and winter visitor. Large colonies exist in the north-west at Scotton and Laughton on ponds among afforested heaths, but the great colony of several thousand pairs at Twigmoor, which was much disturbed during the last war, is now

(1953) almost extinct. There are smaller colonies on coastal saltings in the Wash at Friskney and Frampton, and a few pairs breed inland: on gravel pits near Tattershall, on the Welland Washes (1951-53), at the Grantham sewage-farm, at Bardney sugar-beet factory ponds and perhaps elsewhere. Breeding birds return to their nesting sites in early March and leave from about early July onwards. Non-breeders are present on the coast and inland throughout the summer. The autumn and winter movements of Lincolnshire-bred birds are largely unknown, but the majority probably do not travel far. A juvenile ringed at Twigmoor in June, 1930, was recovered in December, 1931, at Boston. Passage movement is difficult to detect, but birds from further north in Britain and from the Continent pass through the county from about mid-July to October and many spend the winter here. A juvenile ringed at Ravenglass, Cumberland, in May, 1913, was recovered near Spalding in December, 1930. Of foreign birds recovered on the Lincolnshire coast between mid-July and mid-February, four had been ringed as juveniles on the Baltic coasts of Denmark and Schleswig-Holstein, two in south Norway and one in south Sweden. The Black-head is common inland during the winter and in many parts of Lincolnshire vast numbers return to the coast in the evening to roost.

Sabine's Gull. *Xema sabini*.

A very rare vagrant. One was seen between Saltfleet and Donna Nook on September 25th, 1893. Two were seen on Holbeach Marsh in September, 1894, and one of these was shot. One was shot at Grainthorpe Haven on September 28th, 1908, and another in the same district on October 19th, 1911.

Kittiwake. *Rissa tridactyla*.

A visitor to the coast throughout the year. It is seldom seen near the shore in winter but is said to be common at sea off the coast. At Gibraltar Point it has been seen on the shore most frequently from mid-April to mid-September. Numbers vary from year to year. They are usually small in spring, but large parties of more than 200 are occasionally present at the end of May and early in June, and some usually remain throughout this month. After the breeding season it occurs more regularly and from early July to early September is present in fluctuating numbers which frequently exceed 100 and may reach 250. In the north-east it is said to be numerous at sea off the coast, but is seldom seen on the shore.

Black Tern. *Chlidonias niger*.

A spring and autumn passage migrant in varying but usually small numbers. In spring it occurs chiefly in May and most frequently on inland waters. In autumn, when it is more numerous on the coast, it has been recorded from the second week of July to the fourth week of October, but the main passage is usually in August and the first half of September and occasionally lasts until early October. At Gibraltar Point it often consorts with other species of terns on the shore in the autumn. It nested in large numbers in the fens of Lincolnshire until their reclamation, probably ceasing to breed when the East Fen was drained in the early 19th century, though eggs are said to have been taken at Crowland Wash about 1845.

[White-winged Black Tern. *Chlidonias leucopterus*.

Two pre-1914 records of birds seen at sea off Gibraltar Point given by Blathwayt are not adequately substantiated.]

Caspian Tern. *Hydroprogne caspia*.

One shot at Caythorpe in Kesteven on May 17th, 1851, is the only record.

Common Tern. *Sterna hirundo*.

A summer visitor and passage migrant. There are breeding colonies on the Wash coast at Friskney and Frampton, but both sites are frequently inundated by the tide and breeding success is usually small. One colony of a few pairs on a gravel pit some sixteen miles from the sea has been in existence for several years, and breeding, probably of this species, was recorded on Cowbit Wash in 1952 and 1953. Spring passage on the coast is from the fourth week of April to early June, but comparatively small numbers are seen then. Large numbers assemble at the entrance to the Wash and on the north-east coast from mid-July until early or mid-September. Flocks of many hundreds of this and the following species are usually present at Gibraltar Point during this period and more than 2,000 are occasionally seen. Smaller numbers—but with occasional large influxes—are seen during the remainder of September and in early October, and there are frequent stragglers until mid-October. On inland waters single birds occur occasionally on spring and autumn passage. Many of the birds in the autumn assemblies on the coast probably come from the Norfolk terneries. A young bird ringed at Blakeney in August, 1933, was

recovered at Frampton Marsh in August, 1938, and another ringed at Blakeney in June, 1924, was recovered near Boston in June, 1931. Some of the birds, however, are passage migrants from the Continent. Four Common Terns ringed in south Finland, south Sweden and north-west Germany have been recovered in Lincolnshire and Norfolk in autumn.

Arctic Tern. *Sterna macrura*.

Since this and the preceding species are not readily separable in the field their relative numbers are somewhat difficult to assess. According to Blathwayt the Arctic was formerly much the more numerous, but the position at the present time is not known with certainty. Arctics occur on spring passage and are present in large numbers in the late summer, forming a considerable proportion of the mixed flocks at Gibraltar Point and elsewhere. One which was recovered inland at Glentworth in August, 1936, had been ringed in the previous month as a young bird on the Farne Islands. Several small colonies have established themselves from time to time on the coast but do not seem to have survived for many years. In 1872 four pairs nested at North Cotes, and in 1883 and 1884 a small colony was reported on Friskney Flats and another on Wrangle Flats in 1912. A pair nested at Gibraltar Point in 1951, 1952 and 1953, but unsuccessfully on each occasion.

Little Tern. *Sterna albifrons*.

A summer visitor and passage migrant. There are two small colonies in the Gibraltar Point nature reserve which have been established for many years. The average number of pairs between 1949 and 1953 has been about 16. There was a small colony north of Mablethorpe in 1949 and one at Saltfleet in 1951 and 1952. A new colony of at least five pairs became established at North Cotes in 1952 and this had increased to twelve in 1953. In the early years of the present century there was a colony on the Humberston foreshore and another at Cleethorpes. A few pairs still nest from time to time in these localities. Breeding birds arrive usually in the third or fourth week of April and most depart during the first half of August. Passage migrants in small numbers are seen at these times and occasionally later in August, in September and in the first few days of October.

Sandwich Tern. *Sterna sandvicensis*.

A passage migrant and visitor to the coast. It is comparatively scarce on spring passage, occurring mainly during May. A few

are seen along the coast at intervals throughout June and early July. In the second or third week of July birds begin to assemble at the entrance to the Wash and large numbers—up to 400 frequently recorded at Gibraltar Point—are present by the end of the month and are usually maintained throughout August. A decrease begins in early September and most have left by the third week. Stragglers occur until mid-October. Elsewhere on the coast the species is seen off-shore at this period and there are large gatherings at some places on the north-east coast. Many of these autumn visitors doubtless come from the terneries on the Norfolk coast and on the Farne Islands. Nestlings ringed in June on the Farnes and at Salthouse in Norfolk have been recovered near Gibraltar Point and at Saltfleetby in the following August and September. At least six pairs nested among a colony of Common Terns at Friskney in 1950, but their eggs were destroyed by high tides.

Family ALCIDAE.

Razorbill. *Alca torda.*

An autumn and winter visitor to coastal waters, being most frequently seen between late July and early October. Small parties are seen from the shore, but it is probably more numerous out to sea. This and other auks are scarcer inside the Wash than off the open coast. It is found on the shore and occasionally inland after storms and oiled birds are all too frequent on the beach. One ringed as an adult on Skokholm Island, Pembrokeshire, in June was recovered at North Somercotes in the following October.

Little Auk. *Plautus alle.*

An irregular winter visitor from November to February. In most winters it is rare or absent, but occasionally, especially after gales, it appears in numbers on the coast and is sometimes driven inland. Considerable numbers occurred in January and February, 1895, in February, 1900, in January and February, 1912, and, more recently, in November, 1948.

Guillemot. *Uria aalge.*

An autumn and winter visitor to coastal waters, occurring, like the Razorbill, from late July onwards and occasionally seen from the shore where it is sometimes driven by storms. It was said by Blathwayt to

be more numerous than the Razorbill, but no recent information about relative numbers is available, although oiled Guillemots are more frequent on the shore than Razorbills.

Puffin. *Fratercula arctica.*

An autumn and winter visitor to coastal waters, but much scarcer than the Razorbill or Guillemot. It is seldom seen from the shore but is occasionally driven inland by gales.

Order COLUMBIFORMES

Family PTEROCLIDAE

Pallas's Sandgrouse. *Syrrhaptes paradoxus.*

During the invasions of this Asiatic species in 1863, 1888, 1889, 1890 and 1899 flocks were seen at several places in Lincolnshire, mainly on the coast but at least once—from January to March, 1899—on the north Wolds. There have been no records since 1899.

Family COLUMBIDAE

Stock Dove. *Columba oenas.*

A resident, less common than the Woodpigeon, but numerous in many districts where hollow trees, ruined buildings and disused nests of Magpie and Carrion Crow provide nesting sites. On the heaths of the north-west and on coastal sand-dunes it also nests in rabbit burrows. It has greatly increased since the latter part of the 19th century. Cordeaux in 1872 stated that in north Lincolnshire it was found only in the neighbourhood of old woodlands and parks and was nowhere very plentiful. According to Caton Haigh it was unknown in the eastern Marsh district before about 1875 and then for some time occurred only as a scarce winter visitor. Blathwayt in 1914 described it as "a common and increasing resident". It occurs in flocks at all seasons of the year, but these are most numerous in the winter months. There is some evidence of passage movement in spring and autumn but more observation is required. Caton Haigh recorded that in February, 1934, it was very abundant on the north-east coast and many were seen coming in over the sea from the north-east.

[Rock Dove. *Columba livia.*

Blathwayt included the Rock Dove in his List since he considered it had probably wandered occasionally from the Yorkshire sea cliffs

where it bred. He admitted that records of this species are always open to doubt because many domestic pigeons closely resemble wild birds. Caton Haigh too included the species in his list of the birds of North Cotes, but he did so with hesitation for the same reason. He occasionally saw, especially in severe weather, flocks of pigeons on the coast which did not appear to belong to any of the adjacent farms and which, he considered, might have been Rock Doves from the Yorkshire sea cliffs. Owing to the uncertainty of identification of pure wild birds and the absence of satisfactory records it seems preferable to exclude the species from this List.]

Woodpigeon. *Columba palumbus*.

An abundant resident and winter visitor in all districts. Winter immigrants begin to appear in October, but most arrive in November and the first half of December and there are often irregular immigrations later until February. The numbers of immigrants vary from year to year but have decreased generally in recent years. Immigrations on the scale of tens of thousands of birds a day recorded by Caton Haigh on the north-east coast in the 1920's and early 1930's no longer occur. It has been suggested that winter immigrants to eastern England come largely from northern Scotland rather than from the Continent. On the north-east coast Caton Haigh found that flights of Woodpigeons arriving before the end of December were usually travelling from the east or south-east off the sea, but those in January and February from the north or north-east. Movements from an easterly direction would not necessarily indicate immigration from the Continent since the flocks may have reached the Lincolnshire coast from an initial dispersal area in East Anglia. At Gibraltar Point since 1949 autumn movement of Woodpigeons, which has been on only a small scale, has been from the north during most of October, but usually from the east towards the end of that month and in November. There is very little evidence of a return movement in spring anywhere on the coast.

Turtle Dove. *Streptopelia turtur*.

A common and well-distributed summer visitor which has greatly extended its range since 1872 when Cordeaux described it as "a rare and occasional wanderer into north Lincolnshire". Caton Haigh first recorded it at North Cotes in 1876 and it first nested in the district in 1887. By 1914 it was generally distributed in the county and had become common in northern districts. It is a fairly common passage

migrant on the coast in spring from the third week of April to mid-June but it is usually scarce in the autumn, occurring mainly between mid-August and mid-September. Passage is heaviest at Gibraltar Point from the third week of May to the second week of June, when more than 100 a day have been recorded. Migrants travel singly or in parties of up to thirty.

[Collared Turtle Dove. *Streptopelia decaocto*.

A single bird was present at Manton near Brigg in north Lincolnshire from the first or second week of May until early September, 1952, and again from late April until early October, 1953. The earlier occurrence has been fully described in *British Birds* (vol. xlvi, pp. 51-55). This Asiatic species has been spreading rapidly north-westwards across Europe during the last twenty years and bred in Holland in 1952. It is not improbable, therefore, that it should have reached England. But circumstances are such that the Manton bird might have escaped from captivity and it must be regarded as doubtfully wild.]

Order CUCULIFORMES

Family CUCULIDAE

Cuckoo. *Cuculus canorus*.

A fairly common summer visitor in almost all districts. It is also a passage migrant on the coast and probably inland in spring and, more frequently, in autumn. The earliest birds arrive about mid-April and passage continues until early June. Most adults have left by mid-August, but young birds remain and are seen on passage until about mid-September. In 1952 and 1953 it was much scarcer than usual on passage at Gibraltar Point and during the breeding season in some inland areas.

Order STRIGIFORMES

Family STRIGIDAE

Barn Owl. *Tyto alba*.

The White-breasted form (*T.a. alba*) is a well-distributed and not uncommon resident, being most numerous in open country. There is some local movement outside the breeding season. In many parts of England there has been a substantial decrease in the number of Barn Owls during the last forty or fifty years. This may well have happened in Lincolnshire also, but there are no comparative figures to provide

definite evidence. Cordeaux in 1899 described it as fairly common in the Humber district, but in 1914 Blathwayt stated that it was not common in the county although widely distributed. At present its numbers seem to be fairly constant, although there is evidently a high mortality rate especially among first and second year birds.

Eagle Owl. *Bubo bubo*.

One was shot near Stamford on April 12th, 1879. Another was taken alive at Stainton-le-Vale in 1848, but there seems little doubt that it had escaped from captivity.

[Snowy Owl. *Nyctea scandiaca*.

A record of its occurrence at Bottesford in the winter of 1868-69 given by M. Peacock and accepted by Blathwayt is not convincing.]

Little Owl. *Athene noctua*.

A fairly common and well-distributed resident, but it appears to have decreased slightly in some districts in recent years. Large numbers were introduced near Oundle, Northamptonshire, in the 1880's by Lord Lilford and the species was breeding in Kesteven by 1906. It had reached the south-western districts of Lindsey by 1908 and by 1914 was well north of Lincoln. Caton Haigh first recorded it in the north-east in 1916 and by 1920 it had reached almost all parts of the county, becoming the most numerous of the owls in some districts.

Tawny Owl. *Strix aluco*.

A resident, well distributed and quite numerous in all except the most treeless districts of the Fens.

Long-eared Owl. *Asio otus*.

A rather scarce and local resident, being largely confined to coniferous woods and plantations. It seems to be most numerous in the north of the county, but there, as elsewhere, it has decreased in recent years. In 1914 Blathwayt described it as "nesting in fair numbers in the larger woodlands throughout the county". It is also a scarce passage migrant on the coast, in autumn from early September and in spring until mid-May. It also occurs singly and occasionally in small parties in the winter months in coastal districts. That some of these migrants are Continental birds is indicated by the recovery in Lincolnshire in February, 1935, of a bird ringed in Holland in June, 1932.

Short-eared Owl. *Asio flammeus*.

A scarce resident, nesting fairly regularly, but probably not every year, in several inland and coastal localities. The former are notably heaths in the north-west and certain remote valleys in the Wolds. On Holbeach Marsh it nests inside the sea bank on recently reclaimed but still uncultivated land, but on other parts of the coast it nests on the salt-marshes. In some seasons, such as 1949, numbers of breeding birds are much greater than usual. There is a similar fluctuation in the numbers of winter visitors which arrive on the coast from September onwards. In some winters, such as those of 1934-35, 1935-36 and 1948-49 it is quite numerous, whilst in others comparatively few are seen. Coastal fields and salt-marshes are especially favoured winter habitats.

Tengmalm's Owl. *Aegolius funereus*.

One shot at Saltfleet Haven on October 22nd, 1880, is the only record.

Order CAPRIMULGIFORMES

Family CAPRIMULGIDAE

Nightjar. *Caprimulgus europaeus*.

A summer visitor, nesting in small numbers on commons and in open pine-birch woodlands in the heath districts of the north-west and in similar country west and south-west of Lincoln and in the Market Rasen and Woodhall Spa areas. Elsewhere inland and on the coast it occurs infrequently on passage.

Order APODIFORMES

Family APODIDAE

Swift. *Apus apus*.

A summer visitor and passage migrant. It is plentiful in most towns and villages where old houses or church towers provide suitable nesting sites. It arrives early in May and the majority have left their breeding places by the third week of August. Passage migration, which takes place on the coast and inland, begins usually in the fourth week of April and continues well into June. On the coast and inland in the Fens and perhaps elsewhere, large southerly movements of Swifts occur with suitable south-westerly winds during the latter

part of June and the first ten days or so of July. Thousands of birds are sometimes involved on days of heavy passage. This movement is noted in other parts of England and Western Europe. The autumn return movement often merges with this summer movement about mid-July and continues until the second week of September with stragglers to the end of the month.

[Alpine Swift. *Apus melba*.

A bird, probably of this species, was seen at Gibraltar Point on September 2nd, 1953. Only a brief view was obtained by one observer, however, and it seems better to place the record in square brackets.]

Order CORACIIFORMES

Family ALCEDINIDAE

Kingfisher. *Alcedo atthis*.

A resident in many districts, nesting on suitable streams and rivers. Its numbers, which are never large, are subject to considerable fluctuation and are probably further affected by severe winters. Kingfishers appear in larger numbers in the coastal Marshland from about mid-August to October and again during late February and March.

Family MEROPIDAE

Bee-eater. *Merops apiaster*.

There are only two records: one shot at Ingoldsby near Grantham in July, 1879; another at Tetney Haven on August 16th, 1880.

Family CORACIIDAE

Roller. *Coracias garrulus*.

A very rare vagrant. One was shot near Louth in October, 1863; another near Bourne in May, 1871. There have been no records since September 26th, 1901, when one was seen near Louth.

Family UPUPIDAE

Hoopoe. *Upupa epops*.

A rare and irregular visitor in spring and early summer and exceptionally in autumn. It has occurred in the last twenty years in May at Goxhill, Withcall near Louth, Great Gonerby near Grantham, Threethingham near Sleaford, Casewick near Stamford, and in October at Brattleby near Lincoln.

Order PICIFORMES

Family PICIDAE

Green Woodpecker. *Picus viridis*.

A resident, well distributed and fairly numerous in all except the most treeless areas of the Fen. It is particularly fond of open, park-like country with plenty of scattered trees and old grassland which it searches for ants. It is more widespread in autumn and winter. Its numbers were much reduced in the severe winter of 1946-47 and were slow to recover.

Great Spotted Woodpecker. *Dendrocopos major*.

A resident, well distributed and fairly common in all wooded districts. It also occurs in small woods in the Fenland. A few Great Spotted Woodpeckers occur fairly regularly on passage on the coast in autumn and less frequently in spring. Some of these migrants are of the British race (*D. m. anglicus*); others may belong to the Northern race (*D. m. major*) which breeds in northern Europe, but so far only one specimen of this race has been definitely identified. It was obtained at North Cotes in October, 1898.

Lesser Spotted Woodpecker. *Dendrocopos minor*.

A resident, rather scarce but well distributed in wooded country.

Wryneck. *Jynx torquilla*.

According to Blathwayt the Wryneck was still a rare summer visitor to the county in 1914, nesting in woodlands chiefly in the south-west and, less frequently, in the north-west and elsewhere. There is no evidence when it ceased to nest, but there have been no definite records since 1914. It is now only a rare and irregular autumn passage migrant on the coast where it has been recorded only five times during the last twenty years, four times on the north-east coast and once at Gibraltar Point. Four of these occurrences were between August 30th and September 5th, and one on October 17th, a late date.

Order PASSERIFORMES

Family ALAUDIDAE

Woodlark. *Lullula arborea*.

A very scarce resident breeding in the heath district in the north-west of the county and probably in similar country near Market Rasen

and west of Lincoln. Blathwayt in 1914 described it as a very scarce resident. He mentioned only two localities for it: in the north-west where it was said to be very rare and at Haverholme near Sleaford where it nested in 1902. Single birds were seen in Normanby Park in the north-west in March, 1919, and April, 1921; a nest with four young was found in the north of the county in 1922, and two pairs, one with a nest, were seen in the same area in 1925. It is said to have bred regularly in one area in the north until at least 1937. Five were seen at Manton in the spring of 1946 and nests have been found in that area each year since 1948. In 1951 Woodlarks were also seen during the breeding season on heathland near Market Rasen and near Lincoln. Whilst it may have nested regularly in the county since 1925, it has undoubtedly increased and extended its range during the last few years. There is some movement of Woodlarks outside the breeding season. At Gibraltar Point single birds have been seen occasionally in March and April and in October and November.

Skylark. *Alauda arvensis*.

A very common resident everywhere in open country. Some of our breeding birds probably leave in autumn when large numbers of passage migrants and winter visitors arrive from the Continent. Passage movement takes place on the coast and less conspicuously inland, from about mid-September to mid-November and there is return movement of much smaller numbers in spring, chiefly during February and March. Winter visitors are usually in flocks.

Shore Lark. *Eremophila alpestris*.

A very scarce and somewhat irregular winter visitor to the coast. Blathwayt recorded its occurrence on the north-east coast during five winters between 1890 and 1914, the largest number seen being 20 to 30 at North Cotes from mid-October, 1913, to mid-February, 1914. In the following winter more than 30 were again present there at the beginning of November, and in January, 1919, there was a flock of 16. It was apparently not recorded again until the winter of 1947-48 when more than 20 were seen in December and January near Gibraltar Point. Since then small parties of from 8 to 12 birds have wintered at Gibraltar Point in 1948-49 and 1951-52 from mid-November to early February; and a few others, singly and in parties of two or three, have been seen on passage there in March and April, and in October and November in those and other years. In October, 1951, two were seen at Cleethorpes, and in November, 1952, one at Holbeach.

Family HIRUNDINIDAE.

Swallow. *Hirundo rustica*.

A common and widely-distributed summer visitor and an abundant passage migrant. Arrivals begin in early April (occasionally in late March) and passage on the coast and inland continues until the first week of June, with stragglers until the third week. Autumn movement begins with young birds about the middle of July and continues until the third or fourth week of October, with stragglers until mid-November. It is usually at its height from the second week of August to the third week of September, when several thousands may be counted passing along the coast on suitable days. Two recoveries in the county of Swallows ringed as nestlings indicate that some of the migrants are of British origin, though others may come from the Continent. One ringed in Denbighshire in June, 1924, was recovered at Saltfleet in August, 1927; another ringed near Bradford, Yorkshire, in the summer of 1950 was recovered in autumn in the same year near Market Rasen.

House Martin. *Delichon urbica*.

A summer visitor and passage migrant. There are colonies in all districts where there are suitable nesting sites. It begins to arrive in the second week of April and passage movement continues on the coast until the first week of June. The autumn movement extends from about the fourth week of July to the end of October, numbers usually being greatest from the second week of August to the third week of September.

Sand Martin. *Riparia riparia*.

A summer visitor and passage migrant. There are breeding colonies in many parts of the county where there are suitable sand and gravel pits. Early arrivals are sometimes before the end of March, but the main spring passage on the coast takes place from the second week of April to the first week of June. In autumn, passage begins about mid-July and continues until the third week of September, with a few until mid-October and occasional stragglers to the end of the month.

Family ORIOLIDAE

Golden Oriole. *Oriolus oriolus*.

A very rare vagrant. There are few authentic records of its occurrence and none since 1914. Cordeaux quoted a report of attempt-

ed nesting at West Raventhorpe near Scunthorpe in 1871, but gave no details. There is a specimen in the Lincoln Museum which was killed at Gainsborough in August, 1908. Blathwayt mentioned that there had been other reports of the nesting or attempted nesting of the species in the north-west in the forty years prior to 1914, but there seems to be no adequate evidence and records of birds seen in this area in 1899 and 1900 are not very convincing.

Family CORVIDAE

Raven. *Corvus corax.*

The Raven may formerly have been resident in Lincolnshire, but, apart from a record of a nest on the north-west pinnacle of Louth Church given in *The Athenian Mercury* of April 1st, 1693, there is no authentic record of it. Cordeaux in 1872 knew of no occurrences in the Humber district in the previous ten years and although in his 1899 List he described it as a rare spring and autumn migrant, he gave no actual records. The only record given by Blathwayt was of one reported at Cadney near Brigg in March, 1901, but this cannot be accepted in the absence of supporting details.

Carrion Crow. *Corvus corone.*

A common resident which has increased in many districts during recent years. Often seen singly or in pairs, but outside the breeding season sometimes in parties which have communal roosts. It appears to be infrequent as a migrant on the north-east coast, but passage movement of varying numbers has been observed at Gibraltar Point occasionally during the first three weeks of April and more regularly during October and the first half of November. Passage has been mainly to the south-west along the coast and only occasionally from the east over the sea.

Hooded Crow. *Corvus cornix.*

An autumn passage migrant and winter visitor from northern Europe. A bird recovered near Grantham on October 29th, 1938, had been ringed as a nestling in Sweden in the previous May. Migrants are seen on the coast as early as the fourth week of September, but do not usually appear in numbers until the third or fourth week of October or even the first week of November. There is a return movement of much smaller numbers in April. It is resident in winter along the coast and in smaller numbers inland, usually in open country. These

THE DENSITY OF ROOKS IN LINCOLNSHIRE 1944-5

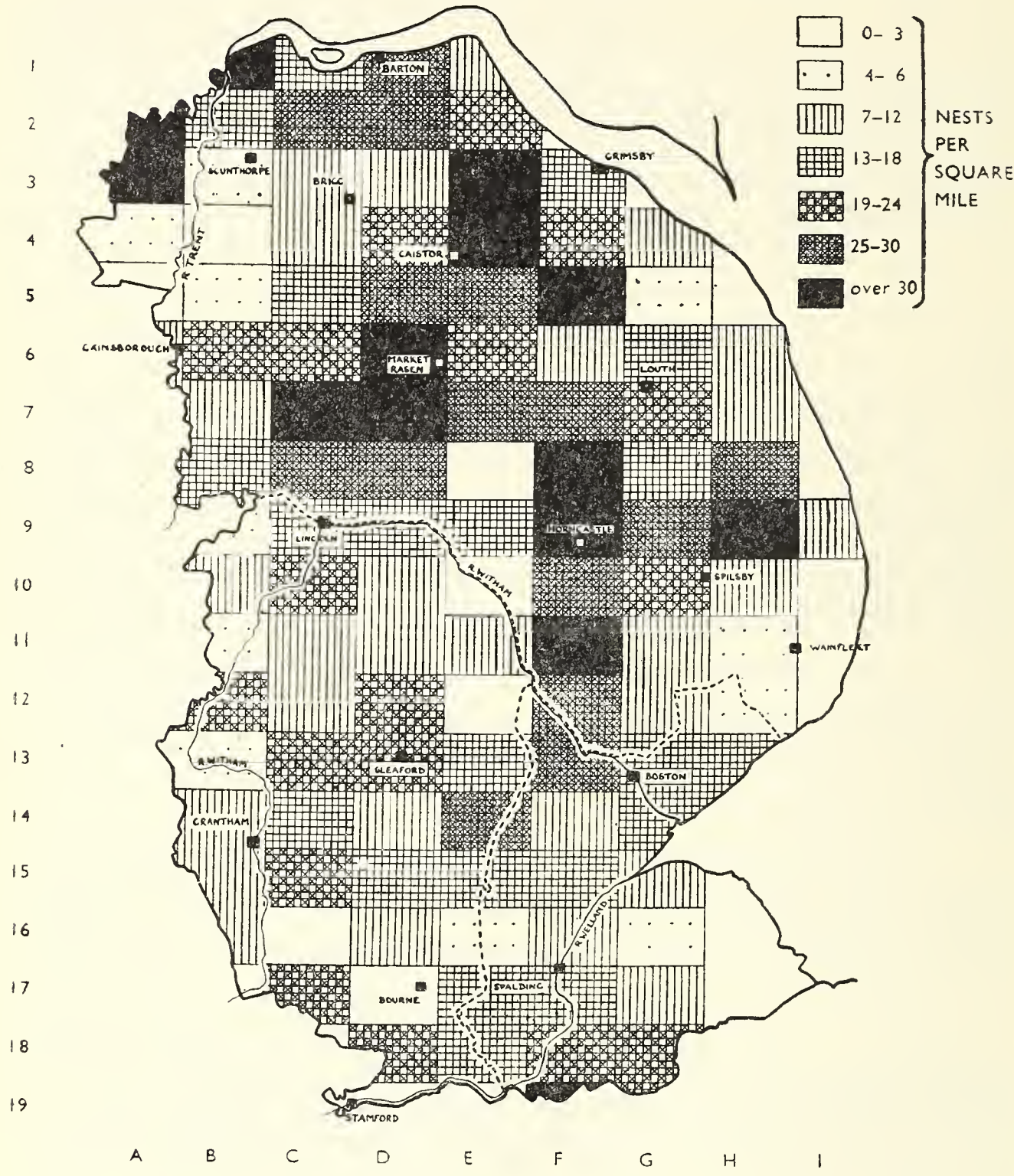


FIG. 8

winter residents have decreased in numbers during recent years especially inland. They leave in March and April, though birds have been recorded on the coast until the end of May. Blathwayt recorded an instance of the nesting of this species in the county, at Market Stainton near Horncastle in 1900.

Rook. *Corvus frugilegus.*

An abundant resident which has increased considerably during the last twenty-five years. Cordeaux noted a gradual increase in the Humber

district as long ago as 1872, as did Peacock in the north-west in 1908. A census of Lincolnshire rookeries in 1944-45 established that there were 45,110 nests in 977 rookeries. This showed a considerable increase over figures obtained in 1933 when there were 35,324 nests in 785 rookeries. After allowing for the fact that some small rookeries may have been missed in the less intensive survey of 1933, it is evident that the Rook population had increased quite considerably in the years between 1933 and 1944. This increase was marked in Lindsey and Holland but almost negligible in Kesteven. The greatest concentration of Rooks occurs on the heavy clay soils of the south-western area of the Wolds, the western side of the Marsh and the area between Lincoln and Market Rasen. On light sand and peat soils their density is much lower. On the north-east coast immigration from the east of large numbers of Rooks takes place mainly during the latter half of October and during November, but no such large-scale movement has been observed at Gibraltar Point. A bird ringed as a nestling in East Prussia in 1933 was recovered at Beelsby in north-east Lincolnshire in February, 1934.

Jackdaw. *Corvus monedula.*

An abundant resident in all districts, occurring usually in colonies where old trees, buildings or quarries provide suitable nesting sites. At Twigmoor Warren Jackdaws nest regularly in rabbit burrows and a similar habit has been recorded on the dunes of the north-east coast. In autumn there is considerable immigration of Jackdaws on the north-east coast, but migration is seldom seen at Gibraltar Point. Migrants usually travel in company with Rooks or Carrion Crows but sometimes in separate flocks.

Magpie. *Pica pica.*

A common resident which has increased steadily during the last thirty years.

Nutcracker. *Nucifraga caryocatactes.*

A very rare vagrant. The only records for the county are of one killed at Sleaford in March, 1883, and another at Marshchapel on November 6th, 1888. It is uncertain to which race of the Nutcracker these records refer, but the slender-billed race (*N. c. macrorhynchos*), which breeds in Siberia and north-east Russia, has occurred much

more frequently in the British Isles than the European thick-billed race (*N. c. caryocatactes*). An account of one seen near Gainsborough in August, 1900, is not convincing.

Jay. *Garrulus glandarius*.

A fairly common resident in wooded districts. This species has increased in many areas during recent years. It is an occasional passage migrant in small numbers, most frequently on the north-east coast in October. Cordeaux in 1899 described it as an occasional autumn immigrant there in October and November. Caton Haigh however, did not encounter it until 1920 when a fairly extensive migration took place at North Cotes between October 12th and 19th. Another occurred in 1923 between October 11th and 26th. On both occasions the birds were in flocks of from two to twenty-five flying for the most part in a south-easterly direction. Since then it has occurred fairly frequently on autumn passage on this part of the coast but only in small numbers. It has been recorded only once on the north-east coast in spring, on April 21st, 1935, when a flock of 25 or 26 was seen flying east over Cleethorpes. At Gibraltar Point it has been recorded only twice, both times in the first half of May.

Family PARIDAE.

Great Tit. *Parus major*.

A common resident everywhere, and a passage migrant on the coast chiefly between mid-March and mid-April and during October and early November. As a migrant it is usually scarce or even absent, but occasionally, as in October, 1949, considerable numbers occur in autumn. A bird ringed at Gibraltar Point in October, 1949, was recovered at Eastbourne, Sussex, in June, 1951. Some of the coastal migrants are of the Continental race (*P. m. major*), examples of which have been recorded from Lincolnshire. British breeding birds belong to the race *P. m. newtoni*.

Blue Tit. *Parus caeruleus*.

A very common resident everywhere, and a passage migrant on the coast chiefly between mid-March and mid-April and during October and early November. Numbers of migrants are usually small, but occasionally large movements occur in autumn, as in October, 1949, when many hundreds passed at Gibraltar Point, at least 500 being seen on the 12th of that month, the day of greatest passage. This large migra-

tion followed a very successful breeding season and it may have been in the nature of a feeding movement from one locality to another. Caton Haigh recorded similar large movements of Blue Tits on the north-east coast in October, 1898, 1899, 1919 and 1923. Critical examination of trapped migrants at Gibraltar Point in mid-October, 1950, showed that all belonged to the British race (*P. c. obscurus*). A Blue Tit ringed as an adult at Spalding in late February, 1950, was recovered at Lackford, Suffolk, in March, 1951.

Coal Tit. *Parus ater*.

A fairly common resident, generally distributed in wooded country but preferring coniferous woods and plantations. It is a scarce passage migrant on the coast in April and October, nearly always in company with Great and Blue Tits. It occurred in slightly larger numbers at Gibraltar Point during the large passage of the latter two species in October, 1949. All the specimens obtained by Caton Haigh on the north-east coast belonged to the British race (*P.a. brittanicus*). On the authority of Cordeaux, Blathwayt stated that birds of the Continental race (*P.a. ater*) occurred occasionally on migration, but Cordeaux's sight records of these, made in October, 1895 and 1898, are not satisfactory evidence.

Marsh Tit. *Parus palustris*.

A not uncommon resident in suitable deciduous woodland. It occurs occasionally on the coast in autumn, but there does not seem to be a regular passage migration.

Willow Tit. *Parus atricapillus*.

A local resident. The relative distributions of Marsh and Willow Tit in the county are largely undiscovered. The Willow Tit is not uncommon in the extreme north-west in the Isle of Axholme where it appears to replace the Marsh Tit. It has also been recorded in the well-wooded lowland district north-east of Lincoln, in the Sleaford and Tattershall districts and at Deeping St. James and Spalding in the south of the county. Its distribution in these and other districts has not been accurately ascertained. At least seven specimens were obtained on the north-east coast between 1894 and 1899, and one or two occurred at Gibraltar Point each year from 1949 to 1952, mainly in July, but once in June and once in September.

Long-tailed Tit. *Aegithalos caudatus*.

The British race (*Ae. c. rosaceus*) is a fairly numerous resident wherever there are suitable woods, coppices or thickets. Its numbers are often depleted in severe winters, but in many parts of the county it survived well the winter of 1946-47. At Gibraltar Point a few parties occur fairly regularly moving south-west between the second week of October and the second week of November, and it is also seen occasionally in autumn on the north-east coast. A bird of the Northern race (*Ae. c. caudatus*) is said to have been seen by Cordeaux at Great Cotes in November, 1872.

Bearded Tit. *Panurus biarmicus*.

It has not occurred in the county for at least a century. It was resident in the fens in the south of the county before their reclamation and probably also in marshy areas in the north-west. According to Montagu it occurred in reed-beds near Cowbit early in the 19th century. In an account written in 1830 and quoted in Yarrell's *British Birds* it was stated that it was still not uncommon in the fens of Lincolnshire, although by 1830 there can have been little suitable habitat left in the area. One is said to have been shot on Brumby West Common near Gainsborough about 1840.

Family SITTIDAE

Nuthatch. *Sitta europaea*.

A scarce resident now entirely confined to the well-wooded south-western corner of the county where it is very sparsely distributed. On the east its range extends to the edge of the Fenland in the neighbourhood of Bourne and it occurs as far north as Leadenham about twelve miles south of Lincoln. In the latter part of the 19th century it is said to have nested in the Manby woodlands in the north-west of the county and to have been a casual visitor in the Spalding district. A pair nested near Grimsby in 1904 and one was seen near Spilsby in November, 1916. Blathwayt referred to it as "a scarce resident, only occurring in the well-timbered districts and seldom wandering", and as being "perhaps less rare in the south-west of the county". During the last thirty years there appear to have been no records of it outside the breeding area in the south-west already mentioned.

Family CERTHIIDAE

Treecreeper. *Certhia familiaris*.

The British race (*C.f. britannica*) is a common resident in wooded districts. Outside the breeding season it moves about the woodlands often in company with parties of tits. Tree Creepers occur occasionally on the coast and an example of the Northern race (*C.f. familiaris*) was obtained at North Cotes in March, 1947.

Family TROGLODYTIDAE

Wren. *Troglodytes troglodytes*.

A very common resident. It is also a passage migrant on the coast, scarce in spring (mainly during April), but more numerous, though in varying numbers, in autumn from mid-September to mid-November. One ringed at Gibraltar Point in September, 1949, was recovered at Potters Bar, Middlesex, in January, 1951.

Family CINCLIDAE

Dipper. *Cinclus cinclus*.

The British race (*C. c. gularis*) is a rare and irregular autumn and winter visitor. Blathwayt gave four records prior to 1914, and there have been three or four since all in the north-east. The race *C.c. cinclus*, known as the Black-bellied Dipper, which occupies northern Europe, was said by Cordeaux to have occurred in the county on a few occasions between 1871 and 1889 usually in October near the coast, but he gave no details. Blathwayt mentioned a specimen obtained at Washingborough near Lincoln about 1905 which had very little chestnut on the breast and which he thought might have been of this race. The evidence for the occurrence of this race is thus not very satisfactory.

Family TURDIDAE

Mistle Thrush. *Turdus viscivorus*.

A fairly common resident, widely distributed. After the breeding season family parties and small flocks move about the countryside. There is some evidence of immigration on the coast in autumn from late September to mid-November.

Fieldfare. *Turdus pilaris.*

A regular winter visitor, usually common but numbers vary somewhat from year to year. Immigration takes place mainly between the second week of October and mid-November, being most marked during periods of easterly winds. Most birds have left again by mid-April, but a few sometimes remain until early May and occasionally until later in that month.

Song Thrush. *Turdus ericetorum.*

A common resident everywhere. In many areas it decreased noticeably during the 1940's, but this may have been due to a series of severe winters, for there was a marked recovery in 1951 and 1952. Birds from other parts of England are known to be in Lincolnshire in winter: nestlings ringed in Norfolk, Durham and Buckinghamshire have been recovered in the county between November and February. It is probable—but not certainly known—that some Lincolnshire breeding birds also winter elsewhere. Song Thrushes are passage migrants on the coast from August to mid-November and, in much smaller numbers, in March and April. British breeding birds and some migrants belong to the race *T. e. ericetorum* which also breeds in Holland, Belgium and western France; but in October and the first half of November some of the migrants belong to the race *T. e. philomelos* which breeds in other parts of Europe. The numbers of autumn passage migrants vary, but they are only large when 'drift' migration takes place in October. It is not known if any of these stay to winter in the county, but many certainly pass on to winter quarters farther south in the Mediterranean region. Migrants ringed at Gibraltar Point in autumn have been recovered in winter between November and February near Valencia, Santander and Cordoba in Spain, in February at Bordeaux and in late March near Perigueux, western France. (Fig. 5).

Redwing. *Turdus musicus.*

A common winter visitor and passage migrant. It arrives from the fourth week of September onwards, the main influzes occurring during periods of easterly winds. Nearly all have left by mid-April, departures being rather earlier than those of the Fieldfare. The majority of these immigrants probably belong to the race *T. m. musicus*, but examples of the Icelandic race (*T. m. coburni*) have been identified on the north-east Lincolnshire coast in recent years in October, December and January. A bird ringed in its first winter at

Gibraltar Point on December 24th, 1950, was shot near Taranto, south Italy, in January, 1952.

Ring Ouzel. *Turdus torquatus.*

A regular passage migrant in small and varying numbers on the coast and occasionally inland. It is very scarce in spring, occurring usually between mid-April and mid-May, but more numerous in autumn from the second week of September to the end of October. It was said by Cordeaux to have nested near Gainsborough, but he gave no details. One was shot near Crowland in January, 1921.

Blackbird. *Turdus merula.*

An abundant resident everywhere. It seems to have increased in recent years. Some Lincolnshire-bred birds leave in autumn to winter farther south and west in the British Isles. One ringed as a nestling at Gibraltar Point in May, 1951, was recovered in Co. Mayo, Eire, in December, 1952. Another recovered in Lincolnshire in July, 1950, had been ringed as an adult in January, 1947, in Pembrokeshire. It is also a winter visitor from the Continent and a passage migrant in varying but usually large numbers. Immigration takes place from late September to the third week of November, but there is only slight evidence of the reverse movement in spring. That some of these immigrants winter in the county is evident from ringing recoveries. Birds ringed in Lincolnshire in January and early February have been recovered in Denmark and south Sweden, whilst a bird ringed on Heligoland in late March was recovered in the county in January. Another which was ringed at Spurn bird observatory in November, 1945, and was recovered in north Lincolnshire in February, 1947, may also have been an immigrant from the Continent. But the majority which arrive on the coast are probably passage migrants on their way farther west. Migrants ringed in autumn at Gibraltar Point have been recovered in winter in Shropshire, Renfrewshire, Peebles and Co. Cavan (Eire). The areas of origin or migration routes of some of these passage migrants are also indicated by recoveries of ringed birds. Birds ringed at Gibraltar Point in autumn have been recovered in south Norway and north-west Germany. One trapped at Gibraltar Point in early November, 1952, had been ringed eight days previously at Hauge in south-west Norway. (Fig. 5).

Wheatear. *Oenanthe oenanthe*.

A very scarce summer visitor and a common passage migrant on the coast and in small numbers inland. It is one of the earliest of our summer visitors to arrive, appearing often before the end of March. Spring migration continues until the first week of June but migrants are most numerous in April. The return movement usually begins towards the end of July, but a few are often seen from the first week onwards. Most birds pass between mid-August and the third or fourth week of September, but smaller numbers are moving until mid-October with stragglers to the end of that month. A few pairs breed on one or two of the remaining open heaths and warrens in the north-west.

Breeding birds and most migrants belong to the race *Oe. oe. oenanthe*, but from the third week of April in spring and from the beginning of September onwards in autumn a small number of the migrants are of the larger Greenland race (*Oe. oe. leucorrhoa*).

Stonechat. *Saxicola torquata*.

Now only a passage migrant and winter visitor. It formerly nested regularly on the heaths of the north-west and on coastal sand-dunes, but a rapid decline set in about 1930 and breeding has not been definitely recorded for several years. Small numbers pass through the county on the coast and inland in spring and autumn—mainly in October and early November—and occasionally in winter.

Whinchat. *Saxicola rubetra*.

A passage migrant and a very scarce summer visitor. During recent years it has been recorded breeding regularly, though very sparsely, only in marshy fields on Humberside and on the heaths of the north-west, but in 1952 and 1953 breeding was recorded in the Fens at Crowland and Cowbit. Formerly it was a more widespread and more common breeding species, but the decrease noted by Blathwayt in 1914 seems to have continued to the present day. It is a regular passage migrant in small numbers in spring from about the fourth week of April to the end of May, and more commonly in autumn from mid-August to mid-September, with a few until early October. It is seen chiefly on or near the coast, being especially fond of harvest fields in autumn.

Red-flanked Bluetail. *Tarsiger cyanurus*.

During a great migration of small passerines at North Cotes on September 19th, 20th, and 21st, 1903, Caton Haigh and his keeper, F. Bacon, saw what was undoubtedly an adult male of this east European and Asiatic species. He was unable to shoot it, however, and although quite convinced of its identity he refrained from publishing the record. It would have been a new addition to the British List at that time. The description of the bird given in his unpublished work on the birds of North Cotes is brief, but leaves no reasonable doubt about its identity. The head, upper back and wings were bluish grey; the lower back and tail bright blue; there was a white eye-stripe and a touch of rust colour on the sides. The under-parts were described by the keeper as white. The keeper had better views of the bird as it moved along a hedge than Haigh, who was on the other side, but, except for the under-parts, Haigh saw enough of it to enable him to confirm his keeper's description. This record was published by the editors of *British Birds* in that magazine in January, 1954 (vol. xlvii. No. 1). Although they stated that there seems no good reason to doubt the record, they prefixed it with the word "probable" because of the great length of time that has elapsed, because neither of the observers is alive and because most of the description was based on the words of F. Bacon and not of Caton Haigh. The first two of these reasons certainly do not seem to us to justify placing the record in square brackets. As for the third reason, Bacon, who regularly accompanied Haigh, was undoubtedly a careful and reliable observer of what he saw, and Haigh himself was able to confirm the essential details of this quite adequate description. We accept this record with confidence and admit it to our List.

Redstart. *Phoenicurus phoenicurus*.

A scarce, local and, in many districts, irregular summer visitor, nesting in parks and old woodland. It is probably more regular in the south-west than elsewhere. It is a passage migrant on the coast and inland from mid-April to the end of May, and in larger but varying numbers in autumn from the second week of August to the first week of October, with stragglers to the end of that month. Largest numbers occur when easterly winds give rise to 'drift' migration. A migrant ringed at Gibraltar Point in August, 1952, was recovered near Avignon in south-east France about eight weeks later, and another ringed on October 1st, 1952, was recovered near Cordoba, south central Spain, on October 9th, 1953.

Black Redstart. *Phoenicurus ochruros*.

A scarce but regular passage migrant in spring and autumn, mainly on the coast but occasionally inland. It occurs usually from the third week of March to the end of April (one at Gibraltar Point on May 20th, 1951), and during October and the first half of November. During the last twenty years it has been more frequently and more regularly observed than formerly. Caton Haigh did not meet it on the north-east coast until 1902. Between then and 1915 he recorded at least six, all in October, but none thereafter. Blathwayt knew of only two or three other definite records prior to 1914.

Nightingale. *Luscinia megarhynchos*.

A regular summer visitor. It is most numerous in the south-west, but the extension of its range northwards, which was noted by Blathwayt in 1914, has continued and it is now generally distributed in all suitable woodlands in the county, though its numbers are perhaps more variable in the north. It occurs very rarely on the coast on spring passage between mid-April and mid-May. There are no autumn records.

Bluethroat. *Cyanosylvia svecica*.

A rare autumn passage migrant, occurring usually during periods of easterly winds which bring 'drift' migrants from the Continent. There are eight records for the county, six from the north-east coast and two from Gibraltar Point. One of these occurred in the first week and six in the second and third weeks of September, and one in the first week of October. Although it seems likely that all these records are of the Red-spotted race (*C. s. svecica*), the juveniles of both sexes and the adult females of this race cannot be distinguished in the field or in the hand from those of the White-spotted race (*C.s. cyane-cula*) which has been recorded much more rarely in Britain.

Robin. *Erithacus rubecula*.

A very common resident in all districts and a coastal passage migrant. Breeding birds are of the British race (*E. r. melophilus*). Passage migrants, many of which belong to the Continental race (*E. r. rubecula*), vary considerably in numbers from year to year. Occasionally, as in early October, 1951, immense numbers arrive on the coast. Other years in which great Robin 'rushes' took place on the north-east coast were given by Caton Haigh as 1892, 1896, 1903, 1913

and 1933. Migration takes place from the fourth week of August to the middle of November, but there is little evidence of return movement in spring. That some of these passage migrants are on their way farther south for the winter is indicated by the recovery in early November, 1950, in the extreme south-west of France of a bird ringed at Gibraltar Point two months previously. Another, ringed on the first day of the great 'rush' of 1951, was recovered at Marck, Pas de Calais, north-west France, fifteen months later.

Family SYLVIIDAE

Grasshopper Warbler. *Locustella naevia.*

A rather scarce and local summer visitor. It may be found in a variety of habitats, especially in open woodland with thick undergrowth, in young plantations and in marshy places with osiers, willows and thorn scrub. It arrives in the second half of April or early in May, and leaves in August and the first half of September. Caton Haigh met with it some half-dozen times in fifty years on passage on the north-east coast, but it has not been recorded on migration at Gibraltar Point.

Temminck's Grasshopper Warbler. *Locustella lanceolata.* (Lanceolated Warbler).

One obtained at North Cotes on November 18th, 1909, is the only record.

[Savi's Warbler. *Locustella luscinioides.*

Cordeaux recorded that he saw a bird which he thought to be of this species at Great Cotes on May 24th, 1897. It may formerly have nested in the Lincolnshire fens before their reclamation but there are no records of it.]

[Great Reed Warbler. *Acrocephalus arundinaceus.*

Cordeaux recorded that he heard a bird of this species at Tetney on July 28th, 1897. Caton Haigh recounted that he visited the site as soon as he heard of "the supposed appearance of this rare bird" but that he failed to find any trace of it. Cordeaux also stated that one was seen near the coast by "a competent observer" some years before 1897. Neither record is convincing.]

Reed Warbler. *Acrocephalus scirpaceus*.

A summer visitor nesting in reed-beds in all parts of the county, though it becomes scarce in the extreme north-west. It seems to have extended its range during the present century for Cordeaux in 1872 spoke of it as "extremely rare" in the Humber district, though apparently he found it more numerous by 1899. P. E. Brown, who made an intensive study of the Reed Warbler in north-east Lincolnshire, found as many as fifteen pairs in a reed-bed of exactly an acre. It arrives in late April and in May, and leaves in August and September. It occurs regularly but in very small numbers on passage on the coast between the third week of July and mid-September and rarely until early October.

Sedge Warbler. *Acrocephalus schoenobaenus*.

A summer visitor, more numerous than the Reed Warbler and, being less restricted in its choice of habitat, more widely distributed. It arrives from about the third week of April onwards and leaves in August and September. It is also a more frequent passage migrant on the coast than the Reed Warbler, occurring occasionally in spring, but more often in autumn during August and September and rarely in early October.

Icterine Warbler. *Hippolais icterina*.

There are three records: one obtained at North Cotes on September 4th, 1922; and two trapped at Gibraltar Point, one on September 6th, 1951, another on August 10th, 1952.

Blackcap. *Sylvia atricapilla*.

A summer visitor in woodland areas. It seems to be slightly less numerous in most districts than the Garden Warbler and tends to be more local in distribution. Its habitat is similar to that of the Garden Warbler, but it is found more frequently in coniferous woodland than that species. It arrives rather earlier, usually from about mid-April onwards, and it has twice been recorded in winter during recent years. On the coast it is a rather scarce but regular passage migrant, mainly between mid-April and mid-May and during September and October.

Barred Warbler. *Sylvia nisoria*.

A rare and irregular autumn passage migrant. There have been eleven records during the last fifty years, nine from the north-east

coast and two from Gibraltar Point. One occurred on August 23rd, seven between September 2nd and 20th and three between October 17th and 21st.

Garden Warbler. *Sylvia borin.*

A summer visitor, fairly common in all deciduous woodland where there is plenty of undergrowth. It arrives from late April onwards. It is a passage migrant on the coast in small numbers from the fourth week of April to the end of May, and more frequently from late July to early October.

Whitethroat. *Sylvia communis.*

A summer visitor, very common everywhere. It arrives from the fourth week of April onwards. It is a passage migrant on the coast in fairly small numbers in spring from mid-April to the end of May, but commonly in autumn from late July to the second week of October with stragglers to the end of that month. Birds trapped at Gibraltar Point in summer have been retrapped there in following years. One ringed at Gibraltar Point in early September, 1951, was recovered near Oporto, north Portugal, in mid-September, 1953.

Lesser Whitethroat. *Sylvia curruca.*

A summer visitor, rather local and much less numerous than the Whitethroat. It arrives about the same time. On the coast it occurs on passage in small numbers mainly during the first three weeks of May and, more frequently, from the second week of August to early October. A bird of the Siberian race (*S. c. blythi*) was trapped at Gibraltar Point on October 2nd, 1949, and another on September 10th, 1952.

Willow Warbler. *Phylloscopus trochilus.*

A summer visitor, abundant in all woodlands. The main arrival takes place in April. It is a common passage migrant inland and on the coast in April and May and from mid-July to mid-October. Largest numbers occur on the coast from mid-August to mid-September. One ringed on passage at Gibraltar Point on April 9th, 1952, was recovered on July 28th of the same year in Vienne Province, France; another ringed on August 15th, 1952, was recovered at Torrelavega, north Spain, two months later; a third ringed on August 10th, 1953, was recovered near Avignon, south France, twenty-five days later.

Greenish Warbler. *Phylloscopus trochiloides*.

Only one Lincolnshire record and the first for the British Isles, a specimen obtained at North Cotes on September 5th, 1896.

Chiffchaff. *Phylloscopus collybita*.

A summer visitor, fairly well distributed in the south-west but rather scarce and local elsewhere. It arrives from late March onwards. It is a passage migrant in small numbers on the coast and inland, chiefly during the latter part of March and during April, and in September and the first half of October. It has been reported wintering in the county on two or three occasions.

Wood Warbler. *Phylloscopus sibilatrix*.

A rare and probably irregular summer visitor. According to Blathwayt in 1914 it nested in suitable spots throughout the county, but the only definite records of breeding since then have been for the Normanby Park estate and Broughton Woods in the north-west in the years prior to 1921. It has occurred in Broughton Woods in summer since then and may have nested, but the few reports from elsewhere inland seem to refer only to passage migrants. It likes beech or oak wood with little coppice or undergrowth, a rather uncommon type of habitat in Lincolnshire. It is a very scarce and irregular passage migrant on the coast and inland, recorded in late April and the first half of May and from the second week of August to mid-September.

Arctic Warbler (Eversmann's Warbler). *Phylloscopus borealis*.

One obtained at North Cotes on October 24th, 1932, is the only record.

Yellow-browed Warbler. *Phylloscopus inornatus*.

A rare and irregular autumn passage migrant on the coast, usually during periods of easterly winds. There are sixteen records for the county: thirteen on the north-east coast and three at Gibraltar Point, all between September 12th and October 19th and all since 1892.

Radde's Bush Warbler. *Phylloscopus schwarzi*.

A specimen obtained at North Cotes on October 1st, 1898, remains the only British record of this eastern Asiatic species.

Family REGULIDAE

Goldcrest. *Regulus regulus*.

The British race (*R. r. anglorum*) is a rather local breeding species, being largely restricted to coniferous woodlands, but where these are extensive it is fairly common. It is more widespread in winter, parties often associating with tits. Its numbers are apt to be reduced by severe winters such as those of 1916-17 and 1946-47. Migrants occur on the coast in autumn in varying but sometimes large numbers, and examples of the Continental race (*R. r. regulus*) have been obtained. Migration occurs from the first week of September until mid-November, but chiefly in October. Large immigrations occur only with easterly winds. Goldcrests are occasionally seen in very small numbers in March and April on return passage.

Firecrest. *Regulus ignicapillus*.

A rare vagrant, having been recorded on only four occasions: on November 9th, 1901, September 28th, 1925, and October 7th, 1931, all at North Cotes; and on April 9th, 1952, at Gibraltar Point.

Family MUSCICAPIDAE

Spotted Flycatcher. *Muscicapa striata*.

A summer visitor, widely distributed throughout the county. It arrives during the second half of May. It is found on the outskirts of woods, in churchyards and old gardens and other similar localities. It is a passage migrant in small numbers on the coast, occurring in spring during the second half of May and early June, and in autumn from the third week of August to the third week of September with stragglers to the first week of October.

Pied Flycatcher. *Muscicapa hypoleuca*.

A passage migrant on the coast and occasionally inland. In autumn numbers vary considerably. In some years it is relatively scarce but it occurs in considerable numbers when weather conditions give rise to 'drift' migration from the Continent. The main movements usually occur between the third week of August and the third week of September with stragglers well into October. It is nearly always scarce in spring, when it occurs mainly in May, but particular weather conditions may very occasionally bring in large numbers, as on May 7th, 1936. The breeding areas of these passage

migrants are not known, but some light is thrown on their autumn migration routes by the recovery in north Portugal in September, 1950, of a young male ringed at Gibraltar Point twenty days previously. Blathwayt gave five breeding records for the county between 1871 and 1901, three of these being in the north-west, one near Market Rasen and one near Sleaford. There have been no records since 1901.

Red-breasted Flycatcher. *Muscicapa parva*.

A rare and irregular autumn passage migrant on the coast. There have been ten records: one at North Cotes in 1908, 1909 and 1922, and two in 1929; two at Gibraltar Point in 1949, two in 1951, and one in 1952. Seven of these occurred between September 8th and 19th, and one on October 3rd, 19th and 23rd.

Family PRUNELLIDAE

Dunnock or Hedge Sparrow. *Prunella modularis*.

The British race (*P. m. occidentalis*) is a very common resident in all districts and a passage migrant on the coast from late August to early November, chiefly from mid-September to mid-October. Some migrant Dunnocks spend the winter in the county and some of these belong to the Continental race (*P. m. modularis*), examples of which have been obtained in recent years at North Cotes in December and February.

Family MOTACILLIDAE

Meadow Pipit. *Anthus pratensis*.

A locally common resident on inland heaths, coastal fields and salt-marshes, and rough pastures in river valleys and elsewhere. It is widely distributed in open country in winter, but many appear to leave their breeding localities. It is one of the most numerous passage migrants on the coast. Movement begins usually during the last week of August or the first week of September and continues almost daily until mid-November, though it is usually at its height between the second week of September and mid-October. During that period migrants passing Gibraltar Point often number more than a thousand a day. In spring there is a much smaller and less regular movement between the third week of February and mid-April.

Richard's Pipit. *Anthus richardi*.

A very rare vagrant. One was obtained at North Cotes on November 16th, 1912. Cordeaux recorded having seen one at Tetney

on October 12th, 1887, and another is said to have been seen at Saltfleetby on October 6th, 1951. Owing to the difficulty of distinguishing this species in autumn from the juvenile Tawny Pipit (*Anthus campestris*), sight records of it are unsatisfactory unless the distinctive note of Richard's Pipit is heard. Apparently it was not in these cases.

Tree Pipit. *Anthus trivialis*.

A locally common summer visitor in many northern, western and south-western districts, but very scarce in most eastern parts of the county. It is particularly numerous on the heaths of the north-west and in similar country around Market Rasen, Woodhall Spa and in the district west and south-west of Lincoln. As a passage migrant it occurs in small numbers on the coast from about mid-August to the end of September with stragglers until the second week of October. In spring it is scarcer, being seen chiefly between mid-April and mid-May.

Rock Pipit. *Anthus spinoletta*.

A fairly common winter visitor to coastal salt-marshes from early October (occasionally late September) onwards. Most leave in March but a few remain into April. British breeding birds belong to the race *A. s. petrosus*, which is also known to breed in Norway and elsewhere on the coast of the Continent, and doubtless many of the winter visitors on the Lincolnshire coast are of this race. Caton Haigh thought it probable also that some of the Rock Pipits on the north-east coast belonged to the race *A. s. littoralis* which breeds in the Baltic region. Among those which remained until April he noticed several which had the vinous feathers on the breast characteristic of this race. A specimen of the Alpine race (*A. s. spinoletta*), known as the Water Pipit, was obtained at Tetney Haven on April 5th, 1895. A bird thought to be of this race was seen at Fosdyke on March 30th, 1952.

Pied/White Wagtail. *Motacilla alba*.

The British race (*M. a. yarrelli*), the Pied Wagtail, is a fairly common resident in all districts. Its numbers were much reduced in many areas by the severe winter of 1946-47 and do not seem yet to have fully recovered, but there may also have been a more gradual decrease over a longer period. Many birds leave their breeding localities in autumn and return in spring. The race is also a regular passage migrant on the coast in varying numbers from about mid-August to late October. Spring passage is not so well defined, but a few occur between the middle of March and the end of April.

The Continental race (*M. a. alba*), the White Wagtail, is a rather scarce but regular passage migrant on the coast and occasionally inland. It has been most frequently recorded between mid-April and mid-May and between the second week of September and mid-October. The difficulty of distinguishing it from the British race, especially in autumn, may cause it to be overlooked.

Grey Wagtail. *Motacilla cinerea*.

A winter visitor to many small streams and lakes, being seldom seen away from the waterside. A few occur regularly on passage on the coast from the second week of September to early November, and it is probably also a spring and autumn passage migrant inland through the county. It nested at Great Cotes in 1897, and it is also said to have nested at Haverholme near Sleaford about 1908.

Yellow Wagtail. *Motacilla flava*.

The race *M. f. flavissima* is a summer visitor unevenly distributed in lowland areas. It is common in the southern part of the Lincolnshire Fenland and fairly numerous in the Trent valley, on Humber-side and in the north-east coastal district; but in the southern parts of the eastern Marshland and the northern Fens it is scarce and irregular. Further investigation of its distribution is required. It is also a common passage migrant on the coast and inland from the second week of April (occasionally from the end of March) to the fourth week of May, and in autumn mainly from the second week of August to about mid-September. Caton Haigh noted a decrease in the numbers of passage migrants on the north-east coast after 1914, but they had apparently increased again there by the 1930's. The central European race (*M. f. flava*), known as the Blue-headed Wagtail, has been recorded only twice: one was obtained in 1894 and another on June 3rd, 1932, both on the north-east coast.

Family BOMBYCILLIDAE

Waxwing. *Bombycilla garrulus*.

An irregular winter visitor, usually rare, but occurring from time to time in considerable numbers as in 1932-33, 1936-37, 1946-47. It has been recorded in every month from October to April. It is usually very tame and often occurs in town parks and gardens as well as in rural localities.

Family LANIIDAE

Great Grey Shrike. *Lanius excubitor.*

A very scarce but fairly regular autumn passage migrant and winter visitor. It is most frequently seen on the coast in October but occasionally also in November, December and January. Inland it has been recorded three times in recent years in December and January, twice in the Brigg district and once near Grantham. At least two were seen in the Barton-on-Humber district in February and March, 1953. One was seen at Twigmoor for eight days in early April, 1951. Except for a small party seen near Tetney Lock on October 30th, 1942, all the records have been of single birds.

Red-backed Shrike. *Lanius collurio.*

A very scarce and irregular summer visitor and passage migrant. A pair nested in 1945 at Barrow-on-Humber, but no other authentic breeding record has been reported in recent years. Two pairs were seen near Spalding in June, 1952, and a pair on Cowbit Wash on May 11th, 1953, but there was no evidence of breeding. Single birds, usually males, have been seen occasionally during the breeding season in one or two other localities. It is reported to have bred frequently in the southern part of the county before 1883, but Cordeaux in 1899 knew of only two instances of breeding in the north. Blathwayt in 1914 could add only two further definite breeding records for the county—at Haverholme near Sleaford in 1907 and 1908—and a possible record at Skegness in 1913. It appears on migration on the coast very infrequently, usually in May, and in August and the first half of September.

Family STURNIDAE

Starling. *Sturnus vulgaris.*

An abundant resident in both town and country and an immigrant from the Continent in vast numbers in autumn. Starlings have been recovered in Lincolnshire in winter which had been ringed as nestlings at Bergen in Norway and in the West Frisian Islands off the coast of Holland, and as migrants in autumn on Heligoland and at Zwolle in Holland. Most of the immigrants are only passage migrants in Lincolnshire and ringing recoveries indicate that many of these winter in the western and north-western counties of England. Thus birds ringed in Lancashire and Cheshire in December have been recovered

on the coast of Lincolnshire in the following March and April. These may have been birds of Continental origin recovered when making their return migration. Ringing recoveries also indicate that some Lincolnshire-bred Starlings likewise winter in western England and in Ireland. A bird ringed in Lancashire in December was recovered in north Lincolnshire in the following May. Young birds ringed in Lincolnshire between mid-June and the second week of August have been recovered in the following October, November and December in North Wales, in Lancashire and in County Kilkenny, Eire. Starling movement begins early in June when large flocks of young birds appear on the coastal fields and marshes. Immigration from the Continent, however, does not usually begin until late September. It continues throughout October and the first half of November. The return movement from late February to about mid-April is less noticeable. Outside the breeding season Starlings feed in flocks which return each evening from a wide area to vast communal roosts in reed-beds, woods, shrubberies and big thorn hedges. (See Fig. 4).

Rose-coloured Starling. *Sturnus roseus*.

A rare vagrant. There have been only three records, all during the present century and all from the north-east of the county. One at Cleethorpes on August 1st, 1909, stayed in a garden for three days. A second was seen among a flock of Starlings at North Cotes on September 10th, 1932, and a third at Holton-le-Clay near Grimsby on August 29th, 1947.

Family FRINGILLIDAE

Hawfinch. *Coccothraustes coccothraustes*.

A scarce resident in most well-wooded districts. In winter small parties move about the woods feeding mainly on the seeds of various kinds of trees. Two juveniles occurred on the coast at Gibraltar Point between 1950 and 1953, one in the third week of June, the other in the fourth week of July.

Greenfinch. *Chloris chloris*.

A common resident, passage migrant and winter visitor. Many Lincolnshire breeding birds are probably largely sedentary. One ringed at a stackyard on Croft Marsh in January, 1951, was recovered only six miles away in June, 1952. Like other finches, it gathers in winter flocks which feed on stubbles, in stackyards and on the sea-

shore. It is a passage migrant on the coast in considerable numbers in October and the first half of November, and, less commonly, in March and April. Some of the immigrants probably winter in the county.

Goldfinch. *Carduelis carduelis*.

A fairly common resident in most districts, having increased considerably during the last fifty years. In the breeding season it is usually found in copses, orchards and large gardens, but in winter is often seen in small parties in open country including the seashore. Passage migration of fairly small numbers takes place on the coast in spring, mainly in the second half of April and the first week of May, and in autumn from mid-September to mid-November.

Siskin. *Carduelis spinus*.

An autumn and winter visitor in small numbers which seems to have become more regular in recent years. It has a particular preference for the seeds of alder, birch and larch, and parties are often found where these trees occur. Although it has been recorded only rarely on the north-east coast, at Gibraltar Point it is seen fairly regularly on migration in very small numbers in the first three weeks of April and from the third week of September to the second week of November.

Linnet. *Carduelis cannabina*.

A common resident in all districts, nesting in a wide variety of habitats. In autumn and winter, flocks are found on stubble fields, waste places and on the seashore. Some of these birds may be winter visitors to the county. It is not known how many of the breeding birds are resident throughout the year. Passage migration involving large numbers takes place on the coast in spring from mid-March to early May, and in autumn from early September to mid-November, chiefly in October.

Twite. *Carduelis flavirostris*.

A regular passage migrant and winter visitor in coastal areas in varying but sometimes large numbers. Flocks of several hundreds are frequent on salt-marshes in the Wash and on the north-east coast. Immigrants arrive from early October onwards. Most have left by early March, but passage of smaller numbers continues until early April. Birds of both the British (*C. f. pipilans*) and Scandinavian

(*C. f. flavirostris*) races have been obtained in the Wash area in winter. Twites often occur in separate flocks but sometimes in company with Linnets.

Redpoll. *Carduelis flammea*.

The British race (*C. f. cabaret*), the Lesser Redpoll, is a scarce breeding species which seems now to be confined to a few localities in the heath district of the north-west. According to Blathwayt it used to nest regularly in many parts of the county in the early years of the present century, and it was fairly numerous even in the immediate vicinity of Grimsby. It nested at Little Brocklesby in 1933. In winter, when it is more numerous, it occurs in parties—sometimes in company with Siskins—in many localities, especially where there are birches, pines or alders, but also in open places such as coastal dunes and salt-marshes. The Continental race of the species (*C. f. flammea*), the Mealy Redpoll, is a scarce and irregular autumn and winter visitor, most of the records being for the north of the county. It was fairly numerous on the north-east coast in the winter of 1913-14, but most of the occasional records since then refer to single birds or very small parties. In early November, 1939, at Brocklesby a flock of about 100 redpolls included at least 25 Mealies. Redpolls occur on passage on the coast in small numbers in spring and autumn, but it is seldom possible to distinguish the race of birds in flight. Two birds trapped at Gibraltar Point in October, 1949 and 1950, were of the British race.

Bullfinch. *Pyrrhula pyrrhula*.

A rather scarce resident in wooded districts and where there are big hedgerows, orchards or large gardens. Outside the breeding season it is rather more widely distributed, occurring usually in pairs. Blathwayt in 1914 described it as common, but this is certainly not true of many districts today.

Crossbill. *Loxia curvirostra*.

An irregular immigrant, occasionally in considerable numbers, as in 1898, 1910, 1927, 1929, 1930 and 1953. In July, 1927, six or seven were seen in the Grimsby district and as many as 50 at Leadenham south of Lincoln. Considerable numbers appeared in several localities in the northern and western parts of the county in July, 1929. They were still numerous in the above-mentioned localities during the winter of 1929-30, and in late June, 1930, a pair were seen feeding young in pines at Little Brocklesby. There may have been another small

irruption in 1935 when several were seen at Swinderby near Lincoln. There was a large immigration of Crossbills into Britain in the summer of 1953, but comparatively few were recorded then in Lincolnshire. There were nine at Limber near Brocklesby in early July and five at Gibraltar Point between mid-August and mid-September. In addition, there were unconfirmed but probable records of eight—including a flock of five—at Gibraltar Point in the first three weeks of July. Except in the years of considerable immigration there have been only a very few records of Crossbills at irregular intervals.

Two-barred Crossbill. *Loxia leucoptera*.

There is one record, an adult male shot at North Cockerington near Louth in September, 1889. There were other British records during the same year.

Chaffinch. *Fringilla coelebs*.

An abundant resident, passage migrant and winter visitor. Winter flocks are probably increased by immigrants from the Continent. A bird ringed at Zuid in Holland on October 22nd, 1930, was recovered in Lincolnshire on April 5th, 1931. Like many others, this bird may have been only a passage migrant through the county. Autumn passage on the coast begins in late September or early October and continues until mid-November. The return migration in spring takes place from early March to the third or fourth week of April. There is also some movement on the coast in January and February.

Brambling. *Fringilla montifringilla*.

A regular winter visitor from October to April. Numbers seem to vary according to weather conditions and the supply of beech-mast, one of its principal foods. Bramblings—often in mixed flocks with Chaffinches—are frequently seen on stubble fields and around stackyards as well as near beech woods. On the coast it is a passage migrant in varying numbers in autumn from early October (occasionally from mid-September) to mid-November. In spring a few are seen from about mid-March to the third week of April. In 1950 a male in breeding plumage spent the summer in a locality near Grimsby.

Yellowhammer. *Emberiza citrinella*.

A very common resident in all districts. In the breeding season it is particularly numerous by roadsides and hedgerows. It is gregarious in winter, frequenting stubble fields and stackyards, often in company with finches and sparrows. On the coast there is a small and somewhat

irregular passage movement from early March to mid-April, and from the third or fourth week of September to about mid-November.

Corn Bunting. *Emberiza calandra*.

A common resident in open country, but its distribution is uneven. Winter flocks are especially fond of stubble fields near the coast. At Gibraltar Point small numbers of Corn Buntings occur regularly from the third week of May to the first week of June.

Girl Bunting. *Emberiza cirlus*.

Cordeaux stated in 1892 that he saw one on January 5th, 1889, at Great Cotes, and that another was seen by Caton Haigh between Grainsby and Grimsby on December 10th of the same year. He also said that he had "several reports of its not uncommon occurrence in the spring and summer near Gainsborough, and on the wild common land and warrens in the Trent district". In 1899 he stated that it was probably resident in these areas and that it was a rare and casual visitor to other parts of the Humber district. In the absence of supporting details this account of its "not uncommon occurrence" in the north-west of the county cannot be regarded as satisfactory. Certainly there seems to have been no authentic record of the species anywhere in the county during the present century and Blathwayt merely repeated Cordeaux's statements.

[Ortolan Bunting. *Emberiza hortulana*.

Cordeaux recorded that he saw one at Great Cotes on May 3rd, 1883, but from his description of the bird the record is not convincing.]

Little Bunting. *Emberiza pusilla*.

One was obtained at Saltfleet on October 5th, 1951. It was an immature male.

Reed Bunting. *Emberiza schoeniclus*.

A fairly common resident, nesting in reed-beds, rushy pastures and salt-marshes. Many breeding birds leave in autumn. It is an autumn passage migrant on the coast from mid-September to the end of October, and occasionally until mid-November. Numbers of migrants are variable, but are fairly small most years.

Lapland Bunting. *Calcarius lapponicus*.

A rare and irregular autumn and winter visitor to the coast. One was obtained at North Cotes in November, 1890. In the winter of 1893 it was numerous on the north-east coast. In January, 1895, a few were seen on Holbeach Marsh. Two were taken in 1904 and three

more in 1913 by a Cleethorpes bird-catcher. A single bird was seen at North Cotes on September 14th, 1921, and during the winter of 1923-24 several were said to have been taken by bird-catchers at Cleethorpes. In 1953 there was an 'invasion' of Britain that is believed to have originated in northern America. About fifty were seen at North Cotes from mid-October to the end of the year and small numbers in the south Wash area in November and December.

Snow Bunting. *Plectrophenax nivalis*.

A regular winter visitor to the coast in varying numbers. Early immigrants have been recorded from the first week of September, but the main arrivals seldom take place until late October or early November. Some of the birds at this time are passage migrants on the Lincolnshire coast. Most of the winter residents have usually left by the end of February, but migrants are seen in March and early April. There is an unusual record of a male in immature plumage at Gibraltar Point on June 29th, 1950. The winter flocks feed amongst the tide-wrack on the shore and on the seeds of salt-marsh and sand-dune plants. It is occasionally seen on stubble fields near the coast, but has seldom been recorded far inland in Lincolnshire.

Family PASSERIDAE

House Sparrow. *Passer domesticus*.

An abundant resident wherever there are buildings. Outside the breeding season many House Sparrows gather in large flocks which feed in cornfields, on stubbles and in stackyards. On the coast it is a passage migrant in considerable numbers in October and early November. The birds travel in small flocks often in company with Tree Sparrows.

Tree Sparrow. *Passer montanus*.

A common resident. In some areas it is rather local in distribution, but in others it is widespread and very numerous in places. It nests in colonies, usually in holes in trees and old buildings, but it has been known to occupy burrows among a colony of Sand Martins on one of the sandy warrens in the north-west of the county. Winter flocks occur sometimes in company with House Sparrows and finches, sometimes separately. It is an autumn passage migrant on the coast from the second week of September, but mainly during October and the first half of November.

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LINCOLNSHIRE

MAP SHOWING SOME OF THE PRESENT-DAY
FEATURES OF THE COUNTY WHICH INFLUENCE
THE DISTRIBUTION OF BIRDS

REFERENCE

	100 FT. CONTOUR
	400 FT. CONTOUR
	LOW WATER MARK
	DECIDUOUS WOODLAND
	CONIFEROUS WOODLAND
	ORCHARDS
	HEATHS
	MARSHES SALT & FRESH
	SAND - DUNES
	PARKLAND
	PARK WITH LAKE
	PONDS, GRAVEL PITS & CLAY PITS
	SEWAGE-FARM

TOWNS OR VILLAGES

- UP TO 10,000 POPULATION
- 10,000 - 20,000 POPULATION
- OVER 20,000 POPULATION

